

Matching students' learning styles to reading activities: A case study to promote positive perceptions towards reading and improve the use of reading strategies

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Dedication

This research is dedicated to my family for their love, support and comprehension. Especially, to my parents, the most important people in my life

Luis Alfredo Martinez Diaz

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This research work is the result of hard effort and devoted time. It was a good opportunity to grow as professional and to keep improving my skills as a teacher.

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Abstract

The concept of learning styles in educational settings is widely spread among the scholar community; there is a significant amount of research studies that deal with this issue. However, few of them focus on the implementation of this theory to improve English language reading skills in high school levels in Colombia. This study attempts to resolve this concern through a case study with a group of 37 students and 1 teacher from a public school in 11th grade. It is explored the changes on students' reading strategies and their perceptions towards reading, when their learning styles are matched to the reading activities in the English class. For conducting this work, a qualitative research was used. Data was collected using the following instruments and techniques: (a) The Perceptual Learning Style Preferences Questionnaire, (b) Metacognitive Awareness of Reading Strategies, (c) Students' Reading Perception Questionnaire, (d) Teacher's Reflective Logs, and (e) Class Audio Recording.

Results showed that the kinesthetic learning style was the preferred by the majority of participants. In the same way, the auditory modality has the highest score as the minor learning style. Finally, the less preferred learning style among the group is the individual modality. It was also found out that when students' learning styles are matched to the reading activities, there is the existence of some changes in the strategies they used when performing reading tasks and in their perceptions towards reading.

Key Words: learning styles, perceptions towards reading, reading strategies.

Introduction

Nowadays, English is one of major concerns in schools and universities. The society is living in a globalized world and English is a common language that permits communication between people from many countries, allowing them to learn from other experiences, exchange information, achieve communicative purposes, and also, to have successful commercial transactions. These aspects have created an enormous demand for English teaching and learning in the world.

Being reading a fundamental skill in the process of learning English, the skill has been focus of attention in the teaching and learning process; many factors have been considered in order to improve the development of this skill in education, among these, the concept of learning styles and their connection to reading can be found.

Reading is a fundamental ability in the field of education and it is an essential skill in the learning of English as a second or foreign language too, due to the fact that student's reading skills development helps them to attain success in all academic areas. The teaching of reading, however, is a complex matter, which is influenced by many variables, for instance, students' individual characteristics and their attitudes towards learning the language.

According to the latest Pruebas Saber 11 report presented by The Colombian Ministry of Education, our students have serious reading skills difficulties (MEN, 2016). Based on this fact, the government has created new programs and adopted new policies to improve this situation, focusing on training teachers on how to master the language and language methodologies so that they could offer a better quality of education.

Regardless to the language taught, reading is a transferrable skill which can be

approached in the English classes. Therefore, it is important to find effective ways to potentiate the way students perceive the skill, and the awareness they have to use reading strategies during reading event. These are key elements in English language classrooms since they help students to improve their reading performance (Uhrig, 2015).

The way students perceive reading and how they select the strategies to read texts have a strong connection with the fact that reading is a very personal and individual process that depends on each individual's characteristics (Anderson, 1999). Thus, it is important to consider that English language classrooms are very pluralistic. This implies that learning styles play an important role and are key elements to consider when planning and designing reading activities in language courses, since pupils' needs can be met.

According to Felder and Silverman (1988), significant amount of learning style research indicates that students learn, progress and achieve better when their courses are built to meet their learning style preferences. This means that every pupil has a preferred way in which he/she best learns.

It is generally assumed that teachers are aware that not all students learn in the same way; every learner has unique and preferred ways to approach and process information in learning situations. In this sense, in order to provide students with more opportunities to have a better academic performance, teachers may propose and balance classroom activities that meet students' learning styles (Conner, et al., 1996). Based on this, it could be said that planning learning activities according to students' learning styles may have a positive effect on their academic performance.

When teachers focus on students' preferred learning styles, pupils show particular ways

to approach the tasks or activities proposed. The way in which these are planned and presented by the teacher has a positive or negative impact on students' performance. Thus, students' disposition and the way they perceive class activities improve when their teachers pay enough attention to their learning style preferences (Hein & Budny, 1999).

In the same way, it is widely believed among some scholars that students' learning styles are key elements to be considered when planning classroom activities. JilardiDamavandi (2011), states that "since there are individual differences in learning style, adapting academic materials to these differences will facilitate learning and thus help increase learning benefits" (p. 187). Being reading and the selection of reading strategies to approach text very individual processes, learning styles might have influence on the way students perceive reading learning materials and the strategies they use to face them.

At this point, it is important to highlight that this research work aims at exploring how matching students' learning styles to reading activities, could shape the strategies they use to perform reading events, and may change pupils' perceptions towards reading in the English class, in a public school in the Caribbean cost of Colombia.

This paper presents the concepts involved in the study as well as some revision of research works that deals with these issues. It is also presented the methodological way in which the study was conducted and the results from the information gathered. Other sections like conclusions, discussion, pedagogical implications and elements for further studies are also part of this work.

This study was conducted in the Caribbean Region of Colombia with 11th grade students from a public school; they are 37 graders whose ages range from 15 to 17. The hours dedicated to the English subject are 5 per week and students do not have a text book as a guide; it is the

teacher who selects and designs the class material according to the school curricula. The present work was a case study to explore the changes on students' reading strategies and their perceptions towards reading, when their learning styles are matched to the reading activities in the English class, in this sense, class interventions to match students learning styles were done. Its results could give insights about learning styles implementation and its relation to the use of students reading strategies in reading events.

Rationale

In the context of this study, it has been discovered through class observations that learners get little involved in reading activities during lessons. They hold negative perceptions towards reading, as can be seen in their conception of reading as a difficult skill. Thus, there seems to be a lack of consciousness about some reading strategies that might work effectively for them so that the reading event could be more fruitful. In the same way, they present apathy to read and boredom gestures when assigned reading activities; such attitudes and perceptions towards reading seems to be associated to learners' low performance in reading tasks. Some evidences of these situations are students' opinions collected through informal interviews, results in reading tasks at school and results in Saber 11 exam in which reading comprehension is a key evaluated component.

The relevance for conducting this research project derives from the fact that its results might give insights for English teachers to improve their professional practice. Therefore, it may help to raise awareness about the importance of taking into account students' learning styles to improve students' perceptions towards Reading and to facilitate students' effective use of reading strategies, so that their performance in Reading tasks can be improved. Besides, it might help students to be better oriented and conscious about the best reading strategies that could work according to their particular ways of learning.

According to the literature on learning styles, a deep understanding of learners' learning styles and their relationship to academic settings can contribute to making the learning process more fruitful (Reid 1995). Additionally, since in the local context there is little research about this issue, this study will provide basis for other teachers and scholars to explore the concept of learning styles and its application to the reading skill in English learning and teaching process in

high schools' settings.

It is generally agreed among teachers and scholars that learning a second or foreign language is a very individual process. Thus, there are little or no similarities in the way each human being approaches the learning of a new language. In the same way, there are some implications and factors that affects positively or negatively the individual's success; one of them is pupils' learning styles; they are generally defined as the abilities or preferred ways to learn. Furthermore, it is commonly believed in the scholar community that matching students' learning styles to teaching activities during a class could have potential benefits in students' performance in all areas and skills of a language – including reading –. However, little research in this field has been done in high school in the Colombian context. Furthermore, there is the existence of a theoretical gap that does not let teachers explore the nature of this theory and its implications in the classroom in the English subject.

The results of this research work are important when making decisions about the kind of reading activities and teaching materials that best benefit students in the English classes, and to provide general insights about the implementation of the theory of learning styles in the Colombian context.

Based on what have been stated before and in order to better understand what happens inside the context of study during reading activities, what decisions teachers take and what factors influence these, the following research questions have been set.

Research Questions:

Main question

- ✓ How does matching students' learning styles to reading activities, influence their perceptions towards reading and shape the reading strategies they use to approach texts in

the English class?

Subquestions

- ✓ What are 11th graders' major, minor, and negligible learning styles?
- ✓ What changes in students' perceptions towards reading can be observed when students' learning styles are matched to reading activities in the English class?
- ✓ What changes in the use of reading strategies to approach texts, can be observed when students' learning styles are matched to the learning activities in the English class?

General Objective and Specific Objectives

General Objective

- ✓ Analyze how matching students' learning styles to reading tasks affect students' use of reading strategies and perceptions towards reading.

Specific Objectives

- ✓ Identify 11th graders' major, minor and negligible learning styles.
- ✓ Analyze possible changes on pupils' perceptions about reading when their learning styles are matched to reading activities.
- ✓ Analyze how matching students' learning styles to reading activities shape the reading strategies they use to approach reading tasks in the English class.

Theoretical Framework

This section presents key theoretical elements that are the bases for constructing the notions of learning styles and their implications in the reading process. The chapter is divided in two sections; the first one is related to the background, conceptualization and implications of the theory, and the second explores the research done around this issue.

Learning Styles Background

The notion of learning styles is not new. In fact, it may be traced back to the time of Aristotle in 334 BC, who talked about individuals' specific talents and skills for learning Cassidy (2004). However, it was not until the beginning of the 90s that many theories, models and classifications of learning styles emerged as the result of studies on personality focusing on individual differences. In the mid and late 90s, research on learning styles increased considerably, since many scholars and teachers tried to apply these theories in the classroom (Cassidy 2004).

Cassidy (2004) states that although the theory of learning styles has its origins in the field of psychology, there has been an increased interest in the last two decades by other domains. Some examples include medical, health care training management, industry, vocational training and a plethora of settings and levels in education. This has resulted in a variety of models depending on the setting the theory is used and somehow has led to a wide recognition and acceptance.

Since the theory of learning styles has been applied and used in many and very different fields, this has resulted in a big amount of interpretations and models. This fact, has given rise to misunderstandings and wrong uses over the term, which has led various researchers to criticize the concept as ambiguous; in order to deal with the ambiguity of the theory, it is relevant to look

at and analyze the existing theories and models on learning styles. Some of them are explored in the next chapter of this section.

The theory of learning styles is nowadays widely accepted and used in many settings. There is a significant amount of articles, books and research works that have dealt with this concept and its implementation in education. However, some scholars argue against the existence and applicability of learning styles (Pashler et al., 2008). They support their arguments on the fact that there is little valid evidence that explains how the concept works in educational settings.

Pashler, et al. (2008), debate as follows;

Although the literature on learning styles is enormous, very few studies have even used an experimental methodology capable of testing the validity of learning styles applied to education. We conclude therefore, that at present, there is no adequate evidence base to justify incorporating learning styles assessments into general educational practice. Thus, limited education resources would better be devoted to adopting other educational practices that have a strong evidence base, of which there are an increasing number (p. 105).

The previous points of view are to some extent contradictory and controversial. The current evidence from articles, books, and research papers from well-known national and international journals on learning styles have demonstrated that the term is actually widely accepted and used in the academic community and educational settings; evidence of this fact can be seen in studies conducted by some scholars like Reid (1987), JilardiDamavandi (2011), Garcia et al. (2007), Zainol et al. (2011) and others. In all cases, results demonstrated the existence and applicability of learning styles in educational settings; these studies have also

showed potential benefits of applying the theory at university and school levels. Detailed descriptions of these studies are provided in the literature review section.

Learning Styles, Definition and Models

The concept of learning styles has evolved and has been used in many different ways. However; there seems to be a high degree of agreement regarding its definition. Honey and Mumford (1992) describe the concept of learning styles as “the individual preferred or habitual ways of processing and transforming knowledge” (p. 144). In the same way, Reid (1987, p. 89) defines “perceptual learning styles” as the changes “among learners in using one or more senses to understand, organize, and retain experience.” Then, Reid (1995) defines Language Learning Styles, as “a student’s preferred method or mode of learning.” Reid (1998, p. ix) redefined the concept as “Internally based characteristics, often not perceived or consciously used by learners, for the intake and comprehension of new information.” Similarly, Pritchard (2009, p. 41) defines learning styles from different perspectives:

- A particular way in which an individual learns;
- A mode of learning – an individual’s preferred or best manner(s) in which to think, process information and demonstrate learning;
- An individual’s preferred means of acquiring knowledge and skills;
- Habits, strategies, or regular mental behaviors concerning learning, particularly deliberate educational learning that an individual displays (p41).”

Other scholars like Felder (1995), stated that learning style refers to “the way in which an individual characteristically acquires, retains, and retrieves information” (p. 28). On the other hand, North Carolina Department of Public Instruction (2009) defines the concept as “a set of factors, behaviors and attitudes that facilitate learning for an individual in a given situation” ...

It is the ability of learners to perceive and process information in learning situations” (pp.2-3).

Having defined the notion of learning styles from various researchers and scholars’ perspectives in educational settings, it is clearly evident the matching and concordance among their definitions; the concept in all cases is generally conceived as a particular way in which a person can perceive, internalize and learn new knowledge. This implies that the term is generally accepted and used in very similar ways regarding education and language learning.

In the same way, the literature provides different models of learning styles. In 1982, Honey-Mumford proposed a model which basically classified learners into four categories: **Activists**; this classification refers to learners who prefer to learn by doing rather than, just reading or listening. They thrive on novelty, and will ‘give anything a try’. They like to immerse themselves in a wide range of experiences and activities and like to work in groups so that ideas can be shared and ideas tested. **Reflectors**; this type of learners stand back and observe; they like to collect as much information as possible before making any decisions; they are always keen to ‘look before they leap’. They prefer to look at the big picture, including previous experiences and the perspectives of others. **Theorists**, refers to learners who like to adapt and integrate all of their observations into frameworks, so that they are able to see how one observation is related to other observations. Theorists work towards adding new learning into existing frameworks by questioning and assessing the possible ways that new information might fit into their existing frameworks of understanding. Finally, **Pragmatists**: is the kind of individuals that are keen to seek out and make use of new ideas. Pragmatists look for the practical implications of any new ideas or theories before making a judgement on their value.

Myers and Briggs (1980) proposed another model derived from a psychological theory of

personality types developed by Carl Jung. This model is commonly known as The Myers and Briggs Type Indicator (MBTI). It is a system which establishes individuals' personality profile. According to this model, learners could be **Extroverts**; who are happy to try things out and who focus on the world of people. **Introverts**; it refers to profiles that are more likely to think things through and to focus on the world of ideas. **Sensors**; they tend to be practical, detail-oriented, and who focus on facts and procedures. **Intuitors**; these individuals are imaginative, concept-oriented and focus on meaning. **Thinkers**; these kind, are sceptical and make decisions based on logic and rules. **Feelers**; they are appreciative and tend to make decisions based on personal and more humanistic considerations. **Judgers**; it refers to individuals that set and follow agendas, and seek closure and completeness even without having the full picture. And **Perceivers**; they adapt to changing circumstances and will defer completion until more is known.

Some other models of learning styles also include the one proposed by Kolb in 1984. He classifies individuals over two continuous dimensions; the first one is the concrete experience mode or the abstract conceptualization mode which is concerned about the way how the learner takes in information. This includes two types of learning styles: **Diverger**; it refers to learners that often use the question 'Why?' and they respond well to explanations of how new material relates to their experience and interests. And, **Accommodator**; learners often use the question 'What if?' and respond well when they are able to apply new material in problem-solving situations. The second dimension is the active experimentation mode or the reflective observation mode which is concerned with how the learner internalizes information. As the previous one, this also includes two classification of learning styles: **Assimilator**; learners that often use the question 'What?' and respond well to information presented in an organized, logical fashion. And **Converger**; it refers to learners who often use the question 'How?' and

respond to having opportunities to work actively on well-defined tasks.

Another model of learning styles is the one proposed by Felder and Silverman in 1988. Although, this model was initially inspired on engineering students, it also gives insides for exploring the learning process in other subject areas such as communication and language. These authors classify learners into four categories according to personality types: **Sensing**, which refers to learners who prefer the concrete, are practical, and are oriented toward facts and procedures; or intuitive learners who prefer the conceptual, are innovative, and oriented towards theories and meanings. **Visual**; are learners who prefer visual representations of material – pictures, diagrams, flow charts; or verbal learners who prefer written and spoken explanations. **Inductive**; it has to do with learners who prefer to consider topics by moving from the specific to the general; or deductive learners who prefer to consider topics by moving from the general to the specific. **Active**; are learners who learn by trying things out and working with others; or reflective learners who learn by thinking things through and working alone. And, **Sequential**; learners who prefer to work in a linear, orderly fashion and prefer to learn in small incremental steps; or global learners who prefer to take a holistic view and learn by taking large steps forward.

Reid's Model

One of the most widely accepted models of learning styles is the one proposed by Reid in 1984; this model was conceived based on the perceptual modalities and foreign language learners characteristics. She classifies learning styles into six types as follows:

- ✓ **Visual Learners:** they prefer seeing things in writing. They have good visual recall and prefer information to be presented visually, in the form of diagrams, graphs, maps, posters

and displays, for example. They often use hand movements when describing or recalling events or objects and have a tendency to look upwards when thinking or recalling information.

- ✓ **Auditory Learners:** they prefer listening. They have good auditory memory and benefit from discussion, lectures, interviewing, hearing stories and audio tapes, for example. They like sequence, repetition and summary, and when recalling memories tend to tilt their head and use level eye movements.
- ✓ **Kinesthetic Learners:** they prefer active participation-experiences. They are good at recalling events and associate feelings or physical experiences with memory. They enjoy physical activity, field trips, manipulating objects and other practical, first-hand experience. They often find it difficult to keep still and need regular breaks in classroom activities.
- ✓ **Tactile Learners:** they prefer hands-on work. such as building models or doing laboratory experiments
- ✓ **Group Learners:** they prefer studying or working with others.
- ✓ **Individual Learners:** they prefer studying or working alone.

In the same way, it is also relevant to consider that students do not have only one learning style. Rather, Reid (1995) proposes the categories of major, minor, and negligible learning styles.

Major learning style refers to the one style that best fits a given student's profile, i.e. as a visual, tactile, auditory, group, individual, or kinesthetic learner. **Minor learning style**, are secondary areas, less strong for any given learner, yet also suited to the learner. These are areas where a learner can still function well. Finally, **Negligible learning styles** is farthest from the natural style for any given student. —Often a negligible score indicates that you may have difficulty learning in that way. One solution may be to direct your learning to your stronger

styles. Another solution may be to try to work on some of the skills to strengthen your learning style(s) in the negligible area(s) (Reid, 1998, p. 166).

The following table summarizes the models explored above.

LEARNING STYLES MODELS	DIMENSIONS
Myers-Briggs (1980)	Extroverts, Introverts, Sensors, Intuitors, Thinkers, Feelers, Judgers and Perceivers
Reid (1984)	Visual, Auditory, Kinesthetic, Tactile, group and Individual
Kolb (1984)	Diverger, Accommodator, Assimilator and Converger
Honey. & Mumford (1992)	Activists, Reflectors, Theorists and Pragmatists
Felder-Silverman (1988)	Sensing, Visual, Inductive, Active and Sequential

Table 1: inventory of learning styles models

Having explored the concepts and related works about learning styles, this research study will follow Reid's classification of learning styles as visual, auditory, kinesthetic, tactile, group and individual learning styles. Furthermore, the definitions she provides about the categorization into major, minor and negligible of learning styles will be considered. In the same way, the Perceptual Learning Style Preference Questionnaire (PLSPQ) is an important tool which will be used in this research study. The study is based on Reid's work because her theory of learning styles is nowadays one of the most widely accepted among scholars. This classification indeed was inspired on foreign language learners learning profiles, which actually, match with the context of study, as in the school English is taught as a foreign language. Additionally, evidence

gathered thorough class observations and informal interviews showed that Reid's model of learning styles is the most predominant among this community. This model not only provides literature with a classification of students' profiles; it also explores the notion that an individual may have different learning styles in different levels or categories. Reid's model of learning styles is nowadays widely accepted among the world language education scholar community.

Learning Styles Applicability in Schools Academic Settings

Today's language classrooms are very pluralistic settings. This is not only because of their variety in students' cultural background, but also because of pupils' differentiation regarding their learning interests, needs, strengths and ways of learning. Based on such premise, it can be considered that classrooms are full of pupils with individual, particular, and preferred ways in which they best learn. This means that students have different ways to approach learning tasks, which in turn implies that the way in which these tasks are planned and presented by the teacher has a positive or negative impact on students' academic performance.

Academic performance is generally assumed within the scholar community to refer to students' results at the end or during a course. It can be conceived as the global or specific achievement in all or one specific language skill. According to Yusuf, (2002) Academic performance is defined as "the observable or measurable behavior of a person in a particular situation" (p. 1). Then, academic performance refers to one dimension of the human behavior that can be observed in a certain period. In this way, in the particular context and setting of this paper, it is understood as the level of success students have when meeting school standards and in particular, in the reading process. This definition is derived from the school curricula conception and from the national standards for English as a foreign language which are provided

by the Colombian Ministry of Education (MEN) (2009).

The theory of learning styles is evidently linked with academic success in general. There is a significant amount of research that states that matching students learning styles throughout class activities and teaching materials may affect positively the second or foreign language learning process. According to Chuah Chong-Cheng (1988) learning styles are not only important but also necessary in academic settings. This point of view implies that knowing students' learning styles is a key element when planning in order to have more comprehensible, interesting and easy activities for students to carry out; as a result, pupils may get better achievements. Similarly, Keefe and Ferrell (1990) state that "learning problems are frequently not related to the difficulty of the subject matter but rather to the type and level of the cognitive processes required to learn the material." In the same way, Dunn (1983) states that dramatic improvement in students' achievement exists in cases where learning styles have been taken into account, which shows that the way things are taught had a greater impact than the content covered in a course of study.

Some authors like Junko, (1998, as cited in Zainol et al., 2011, p.144), asserted that "Learners having different learning style preferences would behave differently in the way they perceive, interact, and respond to the learning environment." This implies that the way class activities are presented and planned has a strong influence on students' personal behavior. Consequently, it is right to assert that one lesson can be attractive to a student and his/her perceptions could change if the activities are presented to match his/her interests and personal way of learning.

Many scholars have agreed that students' learning styles play an important role in

English language learning. Felder and Silverman (1988), for example, claimed that when they are taken into account for planning the teaching practice, there is a positive impact on learners' academic performance. Also, some studies about learning style indicate that students learn, progress and achieve better when their courses are built to meet their learning style preferences (Felder and Silverman, 1988).

If teachers can recognize students' learning styles, it is possible to identify the conditions that best satisfy pupil's needs. Then, it is important to say that in order to turn the language learning process into a more motivating experience and turn students' attitudes into positive, teachers need to think about developing activities which maintain student interest. Identifying and understanding students' learning styles are key elements that have a great importance for improving language teaching practices. Young learners; especially teenagers are very exclusive when deciding what they like doing, that is why teachers have to prepare attractive activities that match their interests; activities that meet their learning styles so that they find the subject interesting and easy.

Students' performance in the reading process is an important issue and one of the major concerns in current Colombian education; this is why the Ministry of Education has repeatedly asked teachers to make efforts to create learning environments and opportunities where students can improve in this skill and achieve the goals proposed in one lesson, unit or term. However, there are some factors that have a direct implication on how well a student performs during a reading activity, one of them being students' learning styles. This suggests that there are clear implications of matching learning styles to students' reading activities and materials. Therefore, work on reading skills applying this theory in the class not only might promote students effective work, but also get better results in this particular skill.

Reading and Reading Strategies

In the broad sense, reading is defined as combination of the text input, appropriate cognitive process, and the information we already know. Thus, reading implies a relation between background conceptions, the characteristics of the text and the knowledge of the reading procedures. All this in a general aspect, constitute the interaction with the texts' characteristics and individual cognitive process (Grabe, 2009). This definition of reading leads to understand that many elements and conditions meet altogether when reading takes place, being the reader and its characteristics the most crucial element that determines how the process happens. Weaver (2009) claims that "reading is a process very much determined by what the reader's brain, emotions and beliefs bring to the reading: the knowledge/information (or misinformation, absence of information), strategies for processing text, moods, fears and joys—all of it" (p. xii).

The way an individual approaches a text and what happens in the whole process of reading differ from one to another; therefore, the strategies he/she uses to convey and construct the text meaning depend on their particular characteristics and background. Weaver (2009, p. xii) states this idea as follows:

The strategies one uses vary according to one's purpose, including whether one is reading for oneself. Only (still the purposes vary) or for somebody else, such as reading to answer comprehension questions, reading to perform for listeners (including the teacher and classmates), and much more. Of course these social factors may generate confidence, fear, anger, defiance, and/or other emotions—it just depends.

Based on the previous premise, it is right to assert that reading is conceived from both a psycholinguistic and a sociolinguistic way. Even word identification itself can be affected by these factors, because reading is as much or more a brain-to-text process as a text-to-brain

process. Furthermore, several factors determine how effective and successful the process is (Weaver, 2009, p. xii).

In the same way, Britt and Rouet (2012) claim that “the reader generates meaning in response to text by using previous knowledge and a range of text and situational cues that are often socially and culturally derived; while constructing meaning, the reader uses various processes, skills, and strategies to foster, monitor, and maintain understanding” (Cited in PISA 2015, p.9).

Additionally, the complexity of reading makes this skill very demanding to understand from the teaching and learning perspective. It is a real challenge for teachers to approach students to reading appropriately and effectively. Thus, reading is a very basic and important skill in order to assure academic success. “The ability to read and comprehend efficiently is essential for meeting the needs of everyday life as well as for success in the academic arena, Anderson et.al (1999 as cited in Alharbi, 2015, p.1). In the same way, lacking reading skills, or even having lower than normal reading abilities can result in truancy, underpaid jobs, and falling prey to the cycle of illiteracy in the next generation (Daggett, 2003). This is why scholars and researcher are constantly seeking for alternatives to improve the teaching and learning process in this skill.

One crucial aspect to keep in mind when teaching students reading are reading strategies (Winograd y Hare, 1998, as cited in Anderson, 1999) define them as “deliberate actions that learners select and control to achieve desired goal or objectives.” Finding out which reading strategy is employed and its effectiveness in improving or helping a learner in comprehending any reading materials, is important to potentiate reading skills. According to Abdul (2011, p.

778), in the context of second or foreign language, learners use strategies to make learning more effective and improve comprehension. On the other hand, Singhal (2001) states that reading strategies “indicate how readers conceive a task”, they help them to understand and guide them to comprehend; therefore, it is important for second and foreign language readers to be aware of their comprehension processes during reading.

Regarding the relevance of reading comprehension, it should be pointed out that it is specifically the basic goal for ESL/EFL students to gain an understanding of the world and of themselves, enabling them to think about and react to what they read Tierney (2005). According to Grabe (1991), reading is an essential skill and probably the most important skill for language learners to master in academic contexts. Since reading comprehension has been distinctively important both in first and second/foreign languages, reading strategies are of great interest in the field of reading research. Reading research has also shed light on metacognitive awareness of reading strategies, perception of strategies, and strategy training and use in reading comprehension.

Reading strategies are important as they can actually assist the learners’ reading process and gives them a clear sense of direction on what they are actually processing while reading; subsequently, reading comprehension strategies allow learners to know how to perform reading tasks, how to interpret readings, and how to manage the situation when they do not comprehend a reading. In other words, reading strategies enable readers to construct meanings most effectively. Identifying which reading strategies works better in a particular reading situation and being aware of it, has enormous benefits in the whole process; understanding and comprehension of the texts improves.

In the reading comprehension process, learners should choose a set of reading strategies to be used in the different reading stages (pre, during and post reading stage). Strategies must be explained and modelled by teachers. The purpose of providing different strategies is to let the students think about reading as a meaningful activity that can be done in a purposeful way. Pardo (2004, p. 272) claims that “by dividing instruction into pre-reading, during reading and post-reading, teachers can design activities for each stage that will improve student’s comprehension and also provide opportunities for teachers to demonstrate strategies that readers can use at each stage”

English learners in general use different reading strategies that suit them well especially when they have different reading materials. Nevertheless, most of them have no knowledge or are not aware of what these reading strategies are as they might not have been exposed to the various reading strategies.

Among the different kinds of reading strategies that are employed by English learners, it can be mentioned Global Reading Strategies (GLOB), Problem Solving Strategies (PROB) and Support Strategies (SUP). Karbalaei (2010) defines them as follows:

- ✓ Global Reading Strategies (GLOB), which can be thought of as generalized or global reading strategies aimed at setting the stage for the reading act (e.g., setting a purpose for reading, previewing text content, predicting what the text is about, etc.),
- ✓ Problem-Solving Strategies (PROB), which are localized, focused problem solving or repair strategies used when problems develop in understanding textual information (e.g., checking one’s understanding upon encountering conflicting

information, re-reading for better understanding, etc.), and

- ✓ Support Reading Strategies (SUP), which involves using the support mechanisms or tools aimed at sustaining responsiveness to reading (e.g., use of reference materials like dictionaries and other support systems).

All the strategies mentioned above are important in the learning process and in the development of reading comprehension since knowledge of strategies allows students to experiment different ways in order to reach more effective learning. Also, learners are more highly motivated when teachers teach them about the use of reading strategies. They can be basically used simultaneously on one reading material such as, the academic materials but some ESL learners are not conscious of which of them they have employed.

Building Up Learning Styles, Reading Skill and Reading Strategies Correlation

As it was previously stated, reading is very much an individual process that is permeated by each learner's individual characteristics and background; one of these being learning styles. Language learning styles and reading strategies are among the main factors that help determine how –and how well –our students learn a second or foreign language (Oxford, 2003). When reading, language learners, consciously or unconsciously make use of some strategies to approach this skill; in this sense, the reading strategies they select conscious or unconsciously might have relation with the learning styles each learner has. Therefore, some changes may appear when pupils' ways of learning are matched or not throughout reading activities. Olsson (2009, p.12), states that reading is primarily visual. Thus, it is directly connected to this perceptual learning style. In the same way, she claims that when reading is adapted to each student's reading style and individual strengths, this lead to better results. Therefore, the way

person approach reading correlates very closely with his or her learning style and perceptual preferences.

According to Sadeghi et.al (2012), current research on learning styles, showed that there is a relationship between the way they establish their learning styles and their success in language learning. On the other hand, both theoretical and empirical studies showed the relationship and the effect of individual learning characteristics on reading comprehension. Since reading strategies emerge automatically when reading takes place, the relationship between learning styles, reading strategies and reading performance might be apparently valid.

Additionally, it can be suggested that through the matching of students' learning styles to reading activities or tasks, a teacher may help students to read and become interested readers; therefore, their perceptions about this skill could also change from negative to positive. Furthermore, it is a good idea to enlighten students to be aware of what reading strategies work better for them according to their particular way of learning. In doing so, pupils will know how to create a reading environment that enables them to develop their reading skills. According to Chambers (1995), reading is something which has its own particular behavioral pattern; this means that the reading event is different in each student. Evidence suggests that it will be easier for the students to read if their individual preferences are met.

Review of Related Literature

Through this section, some studies about students' learning styles and their relation with the process of reading and academic performance are presented. In this way, some researchers have deeply investigated about learning styles and its relationship with academic performance. Similarly, it can be found some studies related to learning styles, reading strategies and reading

skill. They are as follows.

Joy M. Reid (1987) conducted a study called “The Learning Style Preferences of ESL Students”. She applied a questionnaire to 1338 native and nonnative English language speaker students to identify their perceptual learning styles preferences. Her statistical analysis of the questionnaire provided the following results: 1. nonnative students learning style preferences often differ significantly from those of native students; 2. ESL students from different language backgrounds sometimes differ from one another in their learning style preferences; 3. other variables such as sex, length of time in the United States, length of time studying English in the U. S., field of study, level of education, TOEFL score, and age are related to differences in learning styles; and 4. Modifications and extensions of ESL student learning styles may occur with changes in academic environment and experience.

JilardiDamavandi (2011) in the study, “Academic Achievement of Students with Different Learning Styles”, investigated about learning styles on the academic achievement of secondary school students in Iran. A total of 285 students 10th grade from governmental schools in Tehran were randomly selected as sample of this study. The results of the analysis of variance showed that there was a statistically significant difference in the academic achievement of the Iranian students that correspond to the four learning styles in particular.

García & Figueroa (2007) presented a mixed qualitative and quantitative research study whose aim was to investigate the learning styles of students and teachers and whether the instructors’ teaching style matched with pupils’ learning styles. The focus group comprised 254 learners and their 9 teachers belonging to public and private institutions in Cordoba, Sucre, Atlántico and Bolivar in Colombia. From the information collected, it was found that the kinesthetic style was the most common, followed by the tactile and the auditory among students while tactile is

avored by teachers followed by kinesthetic and visual. It was also observed that there was a little match between students' learning style and educators' teaching style.

Zainol et al. (2011) in the study conducted, "Learning Styles and Overall Academic Achievement in a Specific Educational System", investigated the relationship between learning styles and overall academic achievement. In order to investigate this relationship a total of 317 students participated in this survey study. The Learning Styles Survey (LSS) instrument which is based on Joy Reid's Perceptual Learning-Style Preference Questionnaire (1987) was used. The analysis of the data indicated a significant relationship between overall academic achievement and learning styles. They also found that the high, moderate and low achievers have a similar preference pattern of learning in all learning styles. Moreover, the learning styles framework did not change with subjects, when it actually plays an important role across all the subjects.

Al-Hebaishi Safaa (2012) presented the result of a study called "Investigating the Relationships between Learning Styles, Strategies and the Academic Performance of Saudi English Majors"; in this study, the purpose was to identify the learning style and strategies preferences of female EFL majors at Taibah University as well as to investigate the relationship of learning styles and learning strategies to academic performance. She collected the data from a sample of (88) participants. The results of her study showed that the visual learning style was the most preferred by the majority of participants. The strategies most frequently employed were cognitive strategies followed by metacognitive strategies. The results also revealed a significant relationship between the visual learning style and memory strategies. Another significant relationship was found between the visual learning style and affective strategies. However, the findings demonstrated the lack of a significant relationship between learning styles and academic performance. In contrast, a significant positive relationship was found between participants' use

of learning strategies and their academic performance.

Williams (2010) in her study called Reading comprehension, learning styles, and seventh grade students, examined sensory learning styles as one possible factor affecting seventh grade students' reading comprehension level. The purpose was to see if a relationship exists between any sensory learning style and reading comprehension levels. The subjects for this study were seventh graders from two suburban junior high schools in Utah. The instruments for this study were The Kaleidoscope Profile and the Scholastic Reading Inventory (SRI). The data were analyzed using the Chi Square test for Independence, ANOVA, and post hoc tests. Results indicated that there was a relationship between learning styles and reading comprehension levels.

Alharbi (2015) conducted a study which aimed to measure the correlations between reading strategies, learning styles and reading comprehension of the Saudi EFL college learners' English reading comprehension. This study used a survey and two IELTS reading passages that vary in difficulty levels. The purpose was to show how two different reading strategies affect EFL students' reading comprehension. The findings showed that the variation of reading strategies, namely oral reading versus silent reading strategies, did not produce any statistically significant differences on EFL learners' reading comprehension. Findings also showed that high visual learners did not perform significantly differently from the silent reading group or the oral reading group. There were no statistically significant differences between silent reading participants and oral reading participants in their performance on either text from the IELTS.

Uhrig (2015), researched in order to attempt to resolve these issues through two case studies of international students' learning strategy use on tasks in professional graduate programs in the US. Data gathered from interviews, documents, and task logs were analyzed first for

strategy use on specific tasks, then for patterns that may indicate consistency according to learning style. The findings indicate that the participants' learning styles provide more predictability in strategy use on particular reading tasks than other factors such as discipline.

Akbari (2013) conducted a study whose purpose of this study was to investigate the relationship between learning styles and the academic performance in reading of students who attend an English class to learn English as a second language in Iran. A randomly selected group of 488 high school students (248 male and 240 female) participated in this study. Results indicated significant relationships between the different learning styles and the performance in an English reading test, and the performance resulted differently in four groups with different preferred learning styles. The study also concluded that learning styles can be considered as a good predictor of any second language academic performance, and it should be taken into account to enhance students' performances specifically in learning and teaching the second/foreign language, and also showed that individual differences in learning styles play an important role in this domain.

Pantoja (2013) conducted a review article which was a compilation of the main learning style models found in the literature. This work was done with the purpose to build an updated theoretical and analytical approach to the subject of learning styles. It was concluded that the extension and depth of the learning phenomenon in general and the learning styles in particular, print complex nuances in the comprehension process related to it, because the set of relationships between the involved variables are unpredictable and unknown for now.

Having reviewed the exiting literature, it was found a significant amount of research dealing with the relationship between matching students' learning styles to different aspects and

improvement in academic performance in general, and in the reading skill. However, none directly establishes a correlation about how matching pupils' ways of learning, shape their perceptions towards reading, and the influence of this matching to teaching activities on the reading strategies they use to approach reading. Some of them provide insights to support this premise though. In this way, having found that there are some studies which have covered these issues, none of them have been done in high school levels; particularly in the English subject in the Colombian context. This indicates that there is a theoretical gap in this field.

Methodology

This section presents an overview of the methodology used to carry out the present study. It contains the type of research, methods and instruments for data collection. Information about how the data gathered was treated and the description of participants, and ethical considerations are also included.

Applied research “strives to improve our understanding of a problem, with the intent of contributing to the solution of that problem” Bickman and Rog (2009, as cited in Merriam, 2009, p.2). It means that research seeks for the generation of knowledge about a problem in order to create possible solutions. This knowledge results from data collection that provides information and understanding about the characteristics of the problem, about the participants involved in the research and about the context of the situation. In the same way, researchers have the responsibility to manage the information in a transparent and rigorous manner; parents fully agreed on their children participating in this study (see written consent in appendixes). This study will mainly focus on qualitative research. According to Seliger and Shohamy (1989), “concerned with studying human behavior within the context in which that behavior would occur naturally and in which the role of the researcher would not affect the normal behavior of the subjects” (p. 118). It will be done in order to explore the relationship between matching students’ learning styles to learning activities in the English class, with the reading strategies they use to perform reading tasks and their perceptions towards reading.

Additionally, according to Merriam (2009), “qualitative researchers are interested in understanding the meaning people have constructed, that is, how people make sense of their world and the experiences they have in the world” (p. 13). Also, in a qualitative research the

focus is to understand people's experiences and the construction of meaning through these experiences.

Although qualitative research was followed for conducting this study, some principles of quantitative research will be used. This has the purpose of obtaining an overall statistical picture of how learning styles are distributed among the participants. This was done by using the Perceptual Learning Style Preference Questionnaire (PLSPQ), a self-report questionnaire that helped the target group to focus and discover their major, minor and negligible leaning styles (Serrano, 2003). In the same way, a survey to identify students' perceptions before and after matching their leaning styles to teaching activities was used (designed by the researcher). Finally, Mokhtari and Reichard's (2002), Metacognitive Awareness of Reading Strategies Inventory (MARSI) Questionnaire, designed to measure adolescent and adult students' awareness and use of reading strategies while reading academic or school-related materials, was applied.

Qualitative approach was used to complement and support the findings obtained from the quantitative task, as well as to provide deeper insights about the relation between matching students' learning styles to learning activities in the English class, with the reading strategies they use to perform reading tasks and their perceptions towards reading. In order to complete the qualitative task, class audio recording, and teacher's reflection journals about the classes were done.

The participants of this study are 37 students form 11th grade, which is one of the 3 11th grade groups at the school; this group was selected randomly. In this sense, a *case study* was carried out.

Case study is defined as a strategy of inquiry in which the researcher makes an in-depth exploration of a program, activity, event, process, on one or more individuals. Cases are bounded by time and activity, and researchers collect detailed information using a variety of data collection procedures over a period of time Lapan, and Riemer (2012). In this sense, this strategy was adopted for his research since it was concentrated on a particular target group of students (three) from 11th grade EFL classrooms.

Participants

The participants for this study are 37 11th graders, 15 male and 22 female students, and 1 English teacher from a public school in the Caribbean Coast of Colombia. The selection of the participants was guided by their disposition to be involved in the study. The students' ages in this group range from 15 to 17; most of them come from very low income families.

In this school, since 2014, the English subject has received more attention due to the fact that the school has been included into a bilingual program called: "Programa Nacional De Fortalecimiento De Competencias Lengua Extranjera Inglés". It is led by the Colombian Ministry of Education, and consists on working to improve three aspects in English language classrooms: teaching materials, teachers training in the target language and teaching methodologies, and curricula development. The purpose is that Colombian students potentiate English communicative competences. The program is based on a set of standards that were built based on the CEF (Common European Framework) for English as a foreign language.

The school does not have many resources and materials for the English teaching practice. It is the teacher that creates, selects, adapts and provides students with materials and content. Thus, teachers have an active participation when creating and designing English syllabuses and

school curricula; this implies that educators have a very good opportunity for the teacher to improve formal aspects related to the English subject.

Ethical Considerations

Ethics is an essential aspect on research. According to Lichtman, (2013) Ethics is “a set of moral principles, rules, or standards governing a person or profession. (p.54). Besides, according to (Cohen, Manion and Morrison, 2007), a set of initial considerations can help researchers to address their research studies: informed consent, the nature of ethics in social research, problems and dilemmas confronting the researcher, ethical problems, guidelines and codes of practice for research and responsibilities to the research community.

Taking into account the aspects mentioned by these authors about ethical considerations, the purpose, of the study, the methods and data collection techniques used in the research were explained to the participants.

The participation of the English teacher and the group of students from 11th grade was voluntary, consequently they signed an informed consent which allows the researcher to use the information provided from questionnaires, interviews, reflective journals and class audio recording. According to (Cohen, Manion and Morrison, 2007), “The principle of informed consent arises from the subject’s right to freedom and self-determination. Being free is a condition of living in a democracy, and when restrictions and limitations are placed on that freedom they must be justified and consented to, as in research” (p.54).

Furthermore, the researcher explained that the study was carried out with the intention to contribute with the qualification of their teaching practices. Besides, the researcher guaranteed anonymity of identities to the participants and that the information obtained from the different

data collection techniques was exclusively used for this study.

Data Sources and Data Collection Procedures

The data for this study came from a group of 37 11th graders and an English teacher from a public school. This information was gathered in two different phases; before and after matching student' learning styles to English reading activities. In the first phase, students learning styles were identified throughout a perceptual learning style questionnaire. Besides, students' perceptions towards reading were also found out using another questionnaire. In the same way, a questionnaire to identify students' reading strategies was also used; additionally, classes were audio recorded to get participants' direct information about their perceptions towards reading and the reading strategies used to approach the reading activities. Finally, teacher's reflection journal was used to figure out students perceptions towards reading. All the instruments and techniques were applied in normal and usual English class conditions, no changes, implementation or application of the theory of learning styles were considered. In the same way, some of the instruments and techniques had the same purpose so that information could be triangulated.

During the second phase, (matching students' learning styles throughout learning activities in the reading skill), the same instruments with the same purposes were applied, except the questionnaire for identifying pupils' learning styles whose information does not change. This had the purpose of looking for changes in students' perceptions towards reading and the reading strategies they use, when their learning preferences were matched and when they were not.

During the second phase of data collection procedures, some conditions in the context of study had to be provided by the teacher in order to collect data that met the research questions

and objectives. These conditions had to do with the necessary adaptations in class methodology and didactics so that students' most predominant learning styles were matched.

The first stage in the process was to apply the questionnaire to identify students' learning styles. Then, the teacher carried out an English class emphasized on reading (see planning in appendices 8). This class was planned based on the school syllabus and had the three stages of teaching reading; pre, while and post reading. The activities selected and the material used corresponded to the sequence of topics proposed in the school curricula for this specific grade. After this class, students had to answer two questionnaires; one to identify their perceptions towards the reading activities and the other to find out the reading strategies they used during the reading events proposed in the class. In the same way, the class was audio recorded and later transcribed as source of information to look for pupils' perceptions towards reading and the reading strategies used during the class. The teacher also provided the study with a reflection journal focused on the general aspects like classroom environment and students' performance regarding reading activities.

Before the second instance of data collection, the teacher was provided with the results of the questionnaire that identified pupils' learning styles. Based on the most predominant modalities; major and minor learning styles among the group, two classes were planned to match these preferred ways of learning.

Matching students' learning styles in class. During the first class no data was collected, it only had the purpose of getting students familiarized with the new teaching way to present class activities, which consisted on matching students' learning styles throughout reading learning activities, see how it worked and make the needed adjustments if needed, for the second

one in which data was collected. In both cases, the class sessions were planned following the sequence of the content proposed in the school syllabus for 11th grade in the English subject as well as the methodological principles proposed in it.

During the second class (see planning in appendix 9) where data was collected, the texts for the reading events were taken from the students' class book and were adapted to present them according to pupils' most predominant way of learning. In this sense, taking into account that kinesthetic, auditory and visual modalities are most predominant in the group, each stage in the class mostly favored these learning styles. In the pre reading stage, they walked around the class looking at their partner's timelines about sports; (as homework from the previous class, each student looked for information about the history of one sport and organized a timeline including images related to the sport and the events presented on it.) and then reported one event out loud; in this case kinesthetic, visual and auditory modalities were matched. This activity also helped to activate students' prior knowledge about the topic and provide them with input for the next step in the class. During the second phase (while reading), some students were given texts about the history and descriptions of different sports and the others, the names of those corresponding to the descriptions. Pupils were required to read the information and find the couples. Then, they shared answers and were presented in power point presentation so that everybody could have the information. After students matched the answers, the teacher oriented reading out loud making emphasis on key information. Four learning styles were favored in this stage; kinesthetic, group, auditory and visual. For the post reading task some questions to check understanding about the previous activity were displayed and asked; one was matching pieces of information, and the other was a multiple-choice questionnaire. In this way, individual, visual and tactile learning styles were favored. Detailed information about how each activity is presented and the

distribution of learning styles according to pupils' preferences, are presented in the appendix 9.

After the last class session, the students answered two questionnaires; one to identify their perceptions towards the reading activities and the other to find out the reading strategies they used during the reading events. In the same way, the class was audio recorded and later transcribed as source of information to look for pupils' perceptions towards reading and reading strategies used during the class. The teacher also provided the study with a reflection journal focused on the general aspects like classroom environment and students' performance regarding the reading activities. In these cases, applying these questionnaires and techniques, the study intended to look for changes in students' perceptions towards reading and changes in the use of reading strategies, in both situations; when pupils' learning styles were matched to learning activities and where they were not.

As it was previously mentioned, each instrument and data collection procedure had a specific role to fulfil this task. All of them were described in this section of the paper. In the same way, to give reliability to the study, the data was carefully gathered, analyzed and triangulated.

In order to collect the data needed for this research, the following data collection procedures and instruments were used.

Questionnaires. According to Seliger et al. (1990) in second language acquisition research, questionnaires are mostly used to collect data on phenomena which are not easily observed, such as attitudes, motivation and self-concepts. They are also used to collect data on the processes involved in using language and to obtain background information about the research subject, such as age, previous background in language teaching and learning.

Three questionnaires were used in this investigation. The intention of using these instruments is to gather information about some particular non-observable behaviors that are relevant in order to address the three research questions stated. The first one is the Perceptual Learning Style Preference Questionnaire (PLSPQ) proposed by Reid (see appendix 1), was used to examine 11th graders' learning styles. In the same way, the Metacognitive Awareness of Reading Strategies Inventory (MARSI) Questionnaire (see appendix 2) was applied, in order to identify and measure adolescent and adult students' awareness and use of reading strategies while reading academic or school-related materials (Mokhtari & Reichard, 2002). Finally, it was used a survey to identify students' perceptions about reading (see appendix 3). The two last questionnaires were applied in two different instances of the research; before and after matching students learning styles to English reading activities.

Class Audio Recording. One class session before matching and one during the matching of students' learning styles to reading activities were audio recorded with the use of appropriate technological devices (see both transcripts in appendixes 4 and 5). This procedure provided the study with participants' authentic data to identify and analyze specific behaviors through voice interaction regarding to the possible changes in pupils' perceptions towards reading and the reading strategies used to approach the reading activities in the English class.

From the methodological perspective, audio recording in research is a valuable technique since it offers important data to give validity and reliability to the study. According to Markle et al. (2011), working with data in its original multimedia – audio or video – state, can provide the research with great trustworthiness and accuracy, as well as thicker descriptions and more informative reporting. In this way, according to Rapley (2007),

"The actual process of making detailed transcripts enables you to become familiar with what you are observing. You have to listen/watch the recording again and again. ... Through this process you begin to notice the interesting and often subtle ways that people interact. These are the taken-for-granted features of people's talk and interaction that without recordings you would routinely fail to notice, fail to remember, or be unable to record in sufficient detail by taking handwritten notes as it happened." (p. 50)

Reflective Journals. After each session, the teacher deeply reflected about his teaching practice focusing on some relevant aspects from the class (see teachers' reflection appendixes 6 and 7). The main focus on reflection are students' behaviors regarding the way they perceive reading activities and changes in reading strategies when pupils' learning styles are matched or not to English reading activities. According to Northern Illinois University, reflective journals are personal records of teachers' experiences. They provide important qualitative data that help the researcher to understand participant's impressions, beliefs, thoughts, feeling and emotions regarding to the issue that is being object of study. In the same way, Equipped for the Future (2004) states that "Journals often focus subjectively on personal experiences, reactions, and reflections" (p: 4). Finally, Journals can be used to reflect on a range of issues and situations from numerous viewpoints and perspectives (RMIT, 2006).

The following table presents a summary of the research instruments and techniques used in the study, their purposes, the research questions addressed and the instances when they are applied.

Instrument / technique	Purpose	Question (s) addressed	When is it applied?
Perceptual Learning Style Preference Questionnaire (PLSPQ)	To examine 11 th graders' learning styles	<ul style="list-style-type: none"> What are 11th graders' major, minor, and negligible learning styles? 	During the initial phase of the study. First instrument to be applied
Metacognitive Awareness of Reading Strategies Inventory (MARSI)	To identify and measure adolescent and adult students' awareness and use of reading strategies while reading academic or school-related materials	<ul style="list-style-type: none"> What changes in the use of reading strategies to approach texts, can be observed when students' learning styles are matched to the learning activities in the English class? 	Before and after matching students' learning styles to reading activities
Students' Reading Perception Questionnaire	To identify students' perceptions about reading	<ul style="list-style-type: none"> What changes in students' perceptions towards reading can be observed when students' learning styles are matched to teaching activities in the English class? 	Before and after matching students' learning styles to reading activities
Class Audio Recording	To identify and analyze specific behaviors through voice interaction regarding to the possible changes in pupils' perceptions towards reading and the reading strategies used to approach the reading activities in the English class.	<ul style="list-style-type: none"> What changes in the use of reading strategies to approach texts, can be observed when students' learning styles are matched to the learning activities in the English class? What changes in students' perceptions towards reading can be observed when students' learning styles are matched to teaching activities in the English class? 	Before and after matching students' learning styles to reading activities
Teacher's Reflective journal	To reflect about his teaching practice focusing on students' behaviors regarding to the way they perceive reading activities and changes in reading strategies when pupils' learning styles are matched or not to English reading activities	<ul style="list-style-type: none"> What changes in the use of reading strategies to approach texts, can be observed when students' learning styles are matched to the learning activities in the English class? What changes in students' perceptions towards reading can be observed when students' learning styles are matched to teaching activities in the English class? 	Before and after matching students' learning styles to reading activities

Table 2. Data collection procedures and techniques

Triangulation of data

In order to give more reliability, validity and credibility to this research, triangulation is

the preferred way among scholars. According to (Yeasmin & Rahman 2012),

“Triangulation is a process of verification that increases validity by incorporating several viewpoints and methods. It refers to the combination of two or more theories, data sources, methods or investigators in one study of a single phenomenon to converge on a single construct, and can be employed in both quantitative (validation) and qualitative (inquiry) studies (p.156)”.

According to Mubarak Alkhatnai (2011, p.107, as cited in Lincoln and Guba 1985), triangulation increases the credibility of interpretations and the probability of the findings. In this sense, the qualitative and quantitative information gathered through research instruments and techniques will be triangulated in a table according to some common criteria which will be determined by the research questions and objectives. According to (Yeasmin & Rahman 2012),

'Triangulation' can also be achieved by using different research techniques. Triangulated techniques are helpful for cross-checking and used to provide confirmation and completeness, which brings 'balance' between two or more different types of research. The purpose is to increase the credibility and validity of the results. Often this purpose in specific contexts is to obtain confirmation of findings through convergence of different perspectives (p. 157).

To accomplish this task, all results from each instrument will be presented individually; then, they will be organized and related in a chart so that common findings can be easily appreciated.

Results and Analysis

This section of the paper presents the results and the analysis of the information gathered throughout the research instruments and techniques. It explores the relationship between students' learning styles and their perceptions towards reading and the reading strategies they use when these were matched or not to the reading activities. The results are reported and analyzed by instruments and techniques as follows.

Perceptual Learning Style Preference Questionnaire (PLSPQ)

In order to identify the students' learning styles, a translated version of the PLSPQ questionnaire proposed by Reid (1987) was used. Results are presented and summarized in the following table and figures.

Learning styles	Visual		Auditory		Tactile		Group		Kinesthetic		Individual	
Categories	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Major learning style (38-50)	0	0%	7	19 %	5	13 %	2	6 %	9	24 %	4	11 %
Minor learning style (25-37)	25	68%	29	78 %	24	65 %	26	70 %	28	76 %	14	38 %
Negligible learning style (0-24)	12	32 %	1	3 %	8	22 %	9	24 %	0	0 %	19	51 %

Table 3: Students' learning styles

Table 3 presents the overall result about students learning styles. The frequency presented corresponds to the number of students in relation to the category of learning styles;

major, minor and negligible, and the learning style type. Thus, the percentage for each frequency is presented.

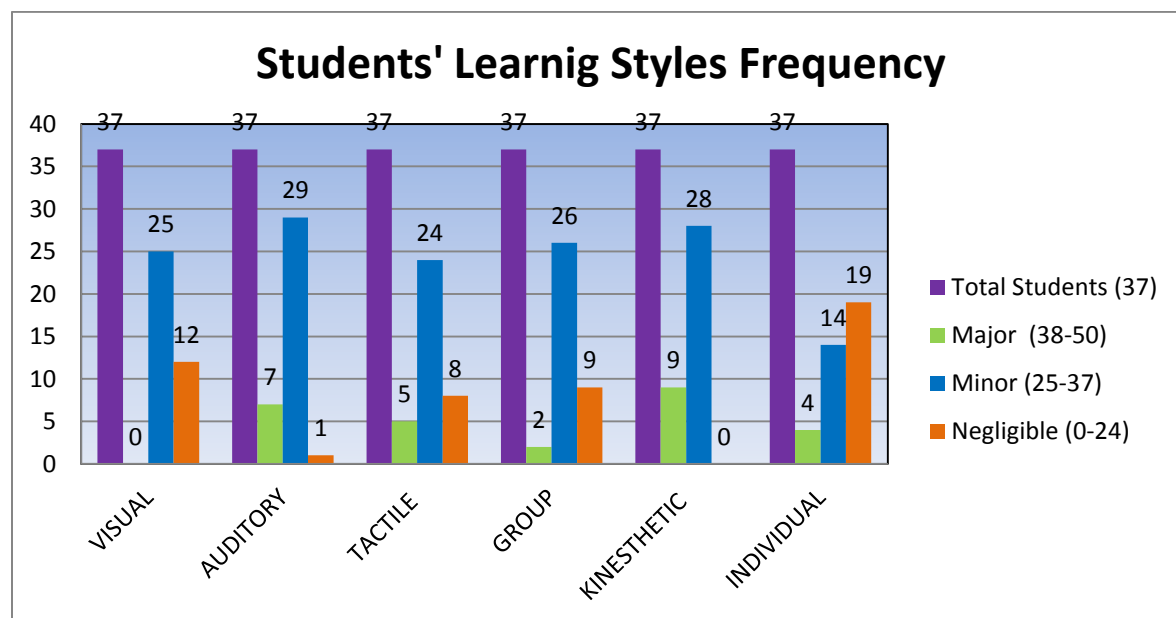


Figure 1. Students' Learning Styles

In Figure 1, it can be observed the general findings of the whole sample included in this study; in the same way, students' preferences in each learning style are evident.

According to the information presented, it can be said that among 11th grade students, the kinesthetic learning style is the most popular as their major preferred way; in the same way, the auditory modality has the highest score as the minor learning style and finally, the least frequent learning style among the group is the individual modality.

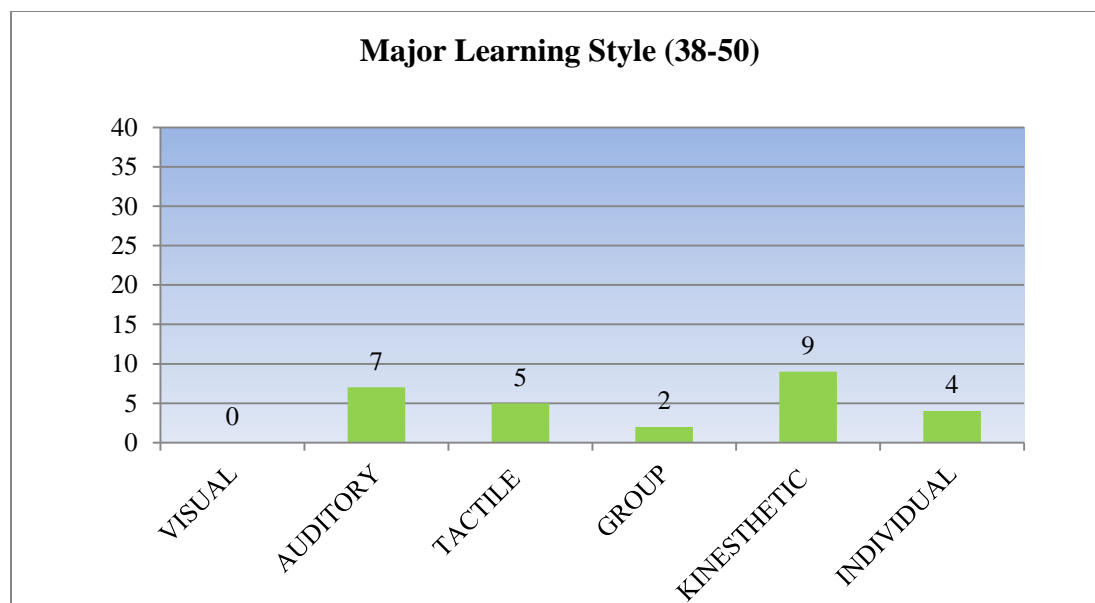


Figure 2. Major learning styles.

Figure 2 shows the distribution of all learning styles in the major category; in this way, it is clearly evident that the most frequent modality is the kinesthetic, followed by auditory and individual. The information presented above leads to the conclusion that teachers have to use activities that imply movement in this population.

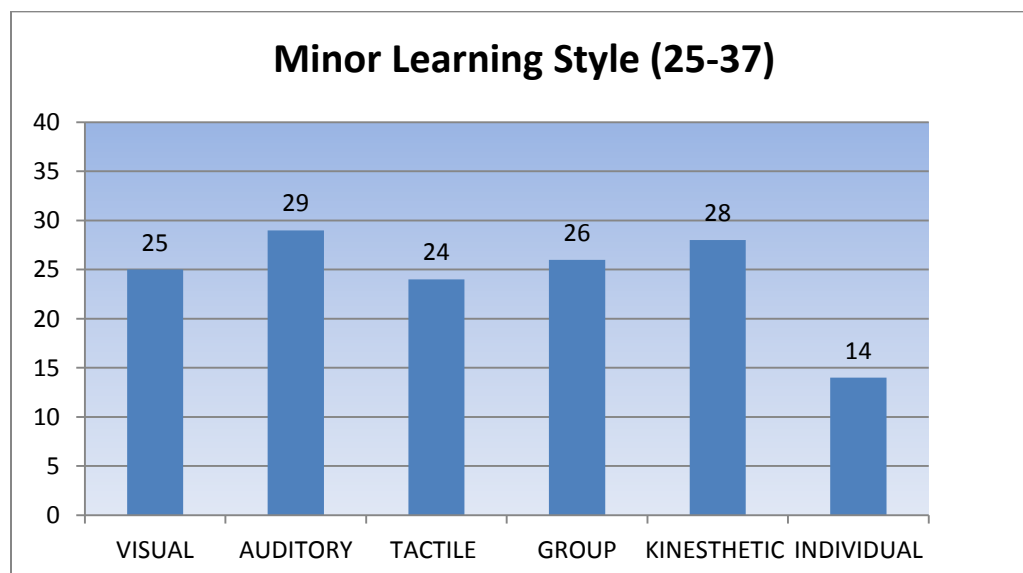


Figure 3. Minor learning styles

Figure 3, demonstrates that for 11th graders, the most predominant learning style in the minor category is auditory followed by kinesthetic and group modalities; according to this, it is a

good idea for teachers to include activities with audio aids that implies listening to perceive information.

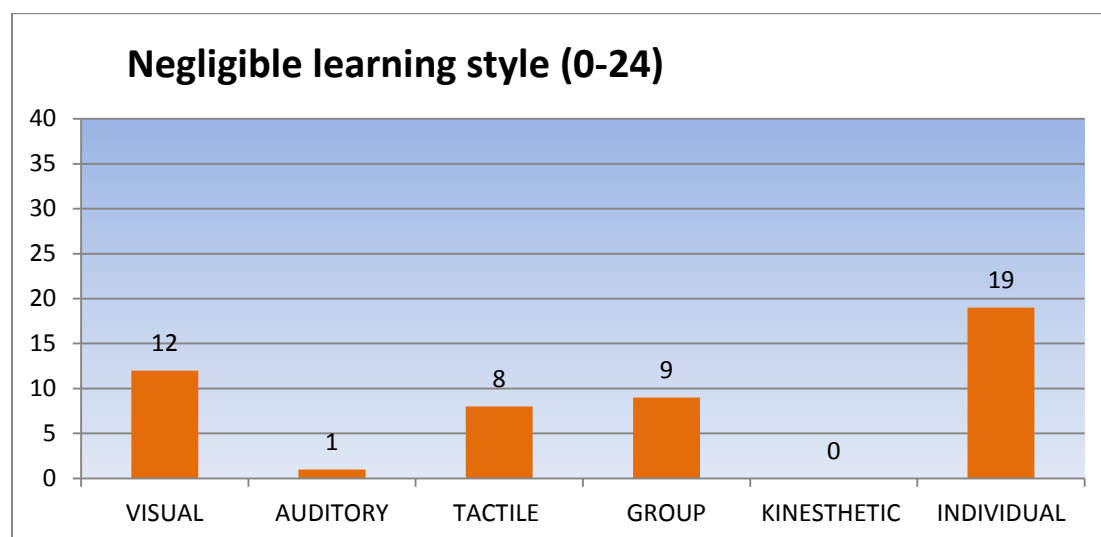


Figure 4: Negligible learning styles

Figure 4, shows the scores for each type of learning style in the category of negligible. According to the result shown in the graph, the population has a clear tendency to have the individual modality followed by visual as negligible; this fact confirms what was stated in figure 2, 11th grade learners have a clear tendency to prefer activities that implies movement, so it is the teacher responsibility to favor this modality in order to meet the preferred way of learning in the majority of the students.

Metacognitive Awareness of Reading Strategies Inventory (MARSI)

Scale	High (3,5 or higher)		Medium (2,5 - 3,4)		Low (2,4 or lower)	
Reading strategy	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
GLOB	9	24,3%	25	67,6%	3	8,1%
PROB	23	62,2%	14	37,8%	0	0,0%
SUP	10	27,0%	19	51,4%	8	21,6%
Overall	12	32,4%	22	59,5%	3	8,1%

Table 4: students' reading strategies before matching their learning styles to reading activities

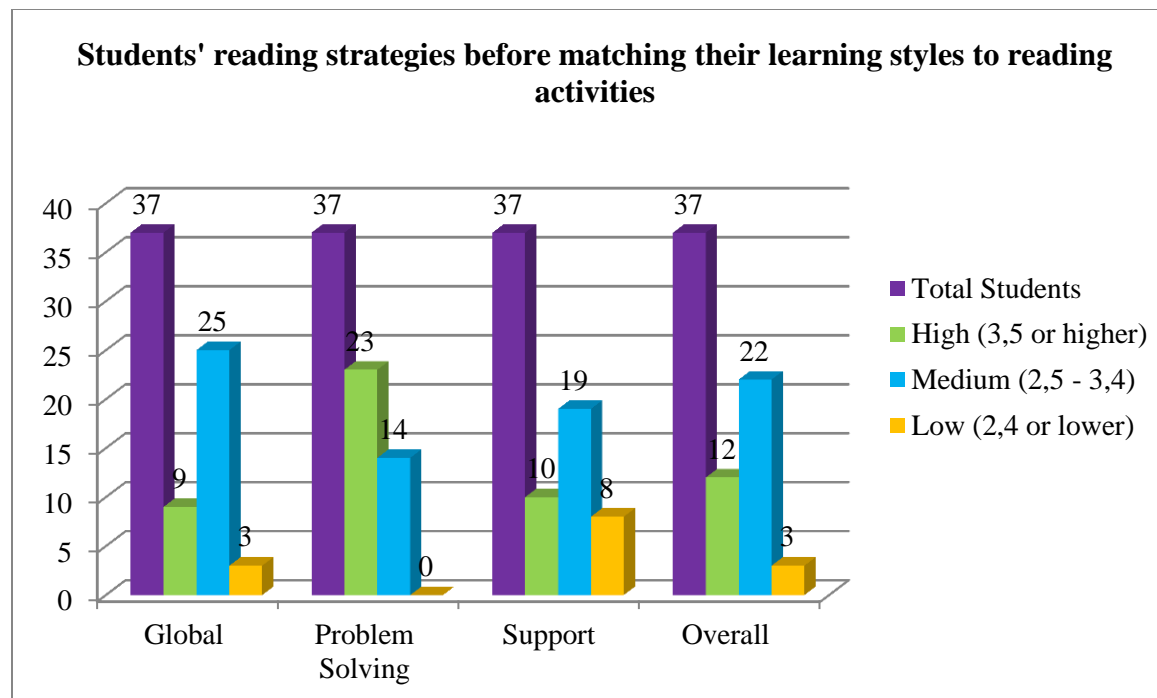


Figure 5: Students' reading strategies before matching

Table 4 and figure 5 presents the results of the reading strategies used by students in the English class when their learning styles are not matched to reading activities. In this way, 24.3 % of the population that corresponds to 9 students out of 37 use global strategies with a high frequency; a higher percentage of 67.6 %, 25 students use them in medium scale and only 8.1%, 3 students use them almost never. Regarding to problem solving strategies, 23 students that correspond to 62.2 % of the population highly use them; 14 students, 37.8 % use this kind of strategies in a medium scale and 0% use them in a low scale. When has to do with support strategies, 10 pupils that correspond to 27.0 %, present a high use; 51.4%, 19 students, use these kind of strategies in a medium scale and 21.6%, 8 students, use them in a low way. Finally, results also show the general use of reading strategies with no discrimination; in this way, 32.4%, 12 students from the whole sample use them highly; the major percentage is in the medium scale, 59.5%, 22 pupils use them, and only 8.1%, 3 students use reading strategies in a low way.

Scale	High (3,5 or higher)		Medium (2,5 - 3,4)		Low (2,4 or lower)	
Reading strategy	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
GLOB	18	48,7%	15	40,5%	2	5,4%
PROB	14	37,9%	10	27,0%	11	29,8%
SUP	7	19,0%	12	32,4%	16	43,2%
Overall	9	24,3%	20	54,0%	8	21,6%

Table 5: students' reading strategies after matching their learning styles to reading activities

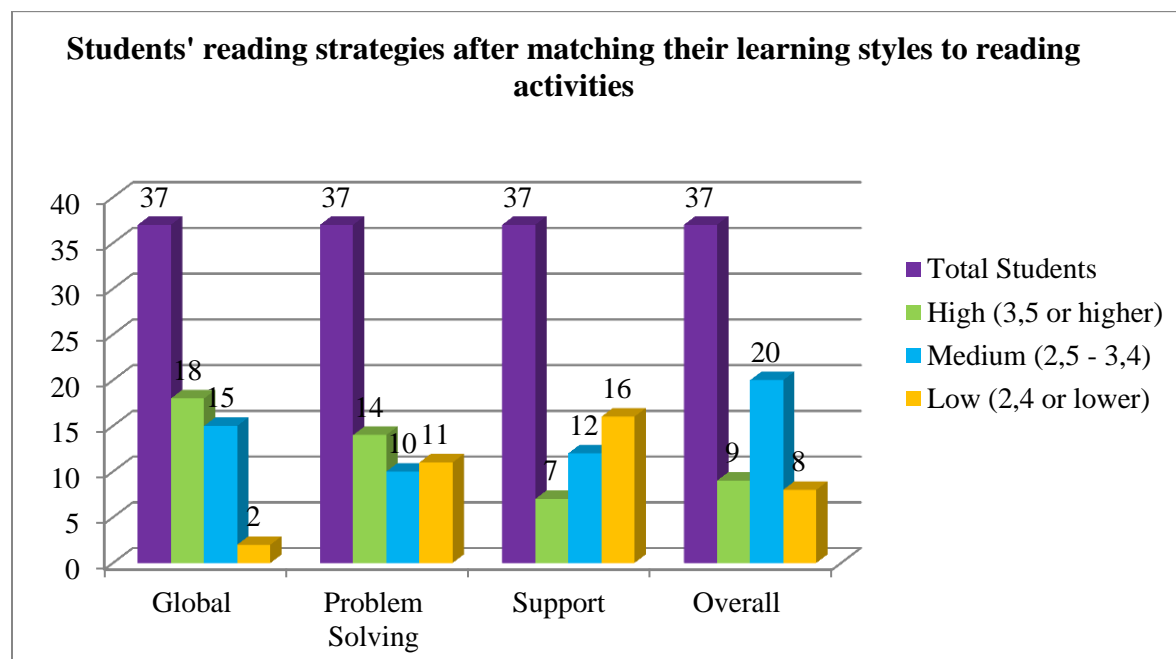


Figure 6: Students' reading strategies after matching

Table 5 and figure 6 presents the results of the reading strategies used by students in the English class when their learning styles are matched to reading activities. In this way, 48.7 % of the population that corresponds to 18 students out of 37 use global strategies with a high frequency; 40.5 %, 15 students use them in medium scale and only 5.4%, 2 students, use them almost never. Regarding to problem solving strategies, 14 students that correspond to 37.9 % of the population highly use them; 10 students, 27.0 % use this kind of strategies in a medium scale and 29.8%, 11 pupils use them in a low scale. Regarding support strategies, 7 pupils that correspond to 19.0 %, present a high use; 32.4%, 12 students, use these kind of strategies in a medium scale and 43.2%, 16 students, use them in a low way. Finally, results also show the

general use of reading strategies with no discrimination; in this way, 24.3%, 9 students from the whole sample use them highly; the major percentage is in the medium scale, 54.0%, 20 pupils use them, and only 21.6%, 8 students use reading strategies in a low way.

Comparing the information presented in the two previous tables and figures, it can be observed significant changes in the use of reading strategies students apply when their learning styles are matched or not. In this sense, in the first situation (not matched), problem solving, followed by support, are the most used; therefore, when carrying out reading activities, students focus their attention on dealing with the text difficulties they face so that they can fulfil the reading task. This tendency shows that since global strategies are the least used, students are not anticipating key elements on the text that can help them make predictions and scaffold their comprehension before reading the text as such. For the second situation (matched), results show a decrease in the use of problem solving and support strategies; on the other hand, the use of global strategies increased. In this sense, because of the way the teaching materials and reading activities were presented according to the most predominant students learning styles among the focus group, the activities themselves might have provided students with supporting elements so that difficulties were reduced; then, the use of the strategies that aim at helping overcome them.

The overall results about the use of reading strategies in general, indicates that only a small percentage of the students make conscious use of these strategies; the highest percentage has a medium scale and a significant sample do not almost use them in both cases; when matched and when not matched to their learning styles. This evidence indicates a lack of students' awareness about how to manage effectively reading tasks and activities.

Students' Reading Perceptions Questionnaire

Negative (0 – 26)		Neutral (27 – 39)		Positive (40 – 65)	
Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
17	46,0%	20	54,0%	0	0,0%

Table 6: Students' reading perceptions before matching their learning styles to reading activities

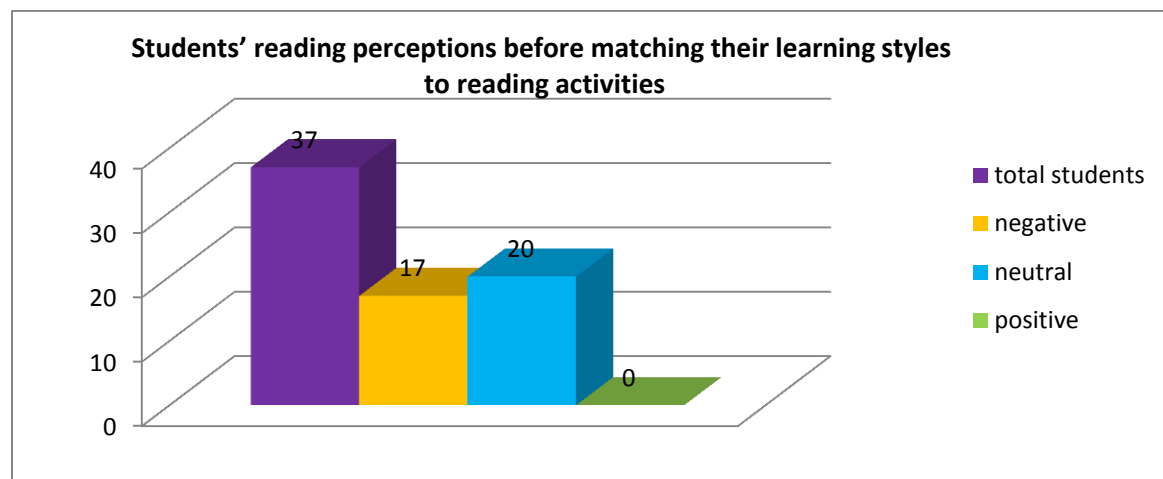


Figure 7: Students' reading perceptions before matching their learning styles to reading activities

Table 6 and figure 7 present the results of students' perceptions towards reading activities in the english class when their learning styles are not matched to them. according to this, a high percentage of the population, 46.0% that correspond to 17 students, have negative perceptions; in the same way, 54.0%, 20 pupils, have neutral perceptions towards reading activities; finally, 0% have positive perceptions.

Negative (0 – 26)		Neutral (27 – 39)		Positive (40 – 65)	
Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
10	27,0%	15	40,6%	12	32,4%

Table 7: students' reading perceptions before and after matching their learning styles to reading activities

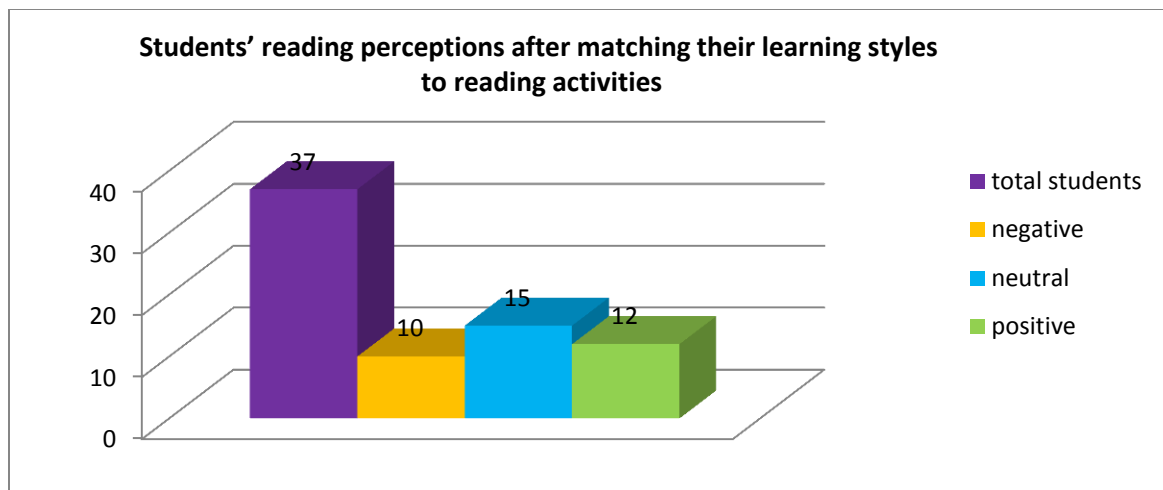


Figure 8: Students' reading perceptions after matching their learning styles to reading activities

Table 7 and figure 8 present the results of students' perceptions towards reading activities in the English class when their learning styles are matched to them. According to this, a low percentage of the population, 27.0% that correspond to 10 students, have negative perceptions; in the same way, 40.6%, 15 pupils, have neutral perceptions towards reading activities; finally, 32.4%, 12 students have positive perceptions.

Comparing the results, there are significant changes in pupils' perceptions when learning styles are matched; there is a valuable decrease in the negative scale and positive moved from zero to twelve percent. Based on this information, it could be said that matching students learning styles in classroom setting has a positive psychological effect on the way students perceive class activities; reading in this particular case.

Class Audio Recording

Before matching students' learning styles to reading activities. The analysis of students' verbal interaction during the English class shows some evidences of how they perceive reading activities. It is common among students to think that reading is something very difficult and boring. There are some patterns and prompts got from the transcript of this class that makes

evident the apathy pupils have towards reading. The teacher asked them to keep silence and focus because they are not concentrated. In some other instances students conceive reading as a way to be evaluated.

12. Sx *Teacher no entiendo esto*
 31. T *Chicos ((claps) se supone que estan reading so you must be in quiet in complete silence right?*
 32. Ss *Teacher esto es un quiz*
 33. T *It is not a quiz, it is only if you are Reading you may be quiet*

Regarding the strategies they use when they are reading it was found that students almost always use only few problem solving and support strategies. The most predominant are the use of dictionary and translation. This reduces a lot the wide rank they have at their disposal and might have some negative effect on the reading performance since they are not managing well the text and its activities. There are plenty of examples of verbal interaction during the whole class where they use them.

29. Ss *Profe, oh teacher puedo usar google traductor*
 44. S1 *Que no entiendo el significado de estas palabras*
 52. Ss *Teacher oh teacher, y puedo utilizar el celular para buscar en el traductor*
 54. T *Y sin diccionario no puedes hacer nada?*
 55. S3 *No porque tengo que buscar los significados para entender*
 69. Sx *Esperando que vengan los diccionarios*
 71. T *Se sienten muy maniatados si no tienen el diccionario?*
 72. S2 *Ps mas o menos Teacher*
 181. Ss *Bien Teacher, estamos respondiendo leo y busco y leo otra vez*
 197. T *Mr. lo mas complicado que fue*
 198. S2 *La traducción del texto aunque y fácil que uno busca en el texto y responde de allí como con palabras claves*

After matching students' learning styles to reading activities. Taking into consideration the changes in the way of presenting reading activities to the students introduced in this class, some differences in the way pupils perceive reading activities and strategy use are

evident. The analysis of students' verbal interactions shows students perceive reading activities in a more positive way. In all of the following examples, students provide expressions that make evident they are interested and working eagerly and want to participate in the class; it is evident that this time the activity was easier for them. The fact that their learning styles have been matched somehow lowered the degree of difficulty and turned the activities into something more attractive and interesting.

- 11. Sx *Hey que dibujo de bacano (.) como se llama este estadio*
- 17. S2 *No teacher (.) I participate*
- 32. Sx *Ese deporte se da en los juegos olímpicos en esa fecha por primera vez (2) mira esos son los anillos de los juegos olímpicos ósea que ahí dice eso (.) mira first es uno*
- 49. Sx *Teacher I want to participate (2) soccer (2) nineteen four (.) the event is (.) creation of the FIFA*
- 56. S3 *This is of Andrea (3) in eighteen eighty eight (4) was the first competition of the leagues*
- 60. Sx *Eh (2) Maria Isabel (4) in nineteen eighty one (4) penalty was introduced*
- 64. S2 *In nineteen fifteen creation of the UEFA*
- 69. Ss *Teacher falta uno (2) skateboarding*

Regarding the use of reading strategies, it can be observed a considerable decrease on the use of the dictionary or the requirement for translation. In the same way, another kind of strategies arose. Evidence of this, are some of pupils' prompts showed above, from which it can be inferred that they made use of global strategies; situation that did not happen in the class when their learning styles were not matched. Then, it can be said that the reading material and the way it was presented according to students' learning styles, provide pupils with more elements, support and gave them more opportunities to explore other textual options when reading. It could be also noticed that the class in general terms was more active and interesting for students. In this sense, the use of global strategies implies a better understanding of text resources and better way to approach text from the very beginning.

- 11. Sx *Hey que dibujo de bacano (.) como se llama este estadio*
- 12. Sx *Mira ahí está el nombre*
- 49. Sx *Teacher espere y tomo notas*
- 75. Sx *Teacher como lo encuentro*
- 76. T *Lee mira tú descripción y busca el deporte que corresponde*
- 77. Sx *Ah (.) pero no tengo que traducir*
- 78. T *No necesitas traducir, usa palabras claves de la descripción y las imágenes y verás que es fácil*
- 79. Ss *Quien tiene tenis*
- 80. Sx *Y tu como sabes que esa es tennis*
- 81. Sx *Porque aquí dice racket y la racket es del tennis*
- 82. Sx *Cierto (.) tu si sabes*

Reflective Journals

Before matching Students' learning styles to reading activities. In the information gathered from the English teacher's notes about the class session, it can be observed he plans the reading class taking into considerations the three stages for teaching reading; pre, while and post reading. There is also evidence about how he considers his students perceive reading activities in the English class. According to his reflection, there is a general lack of interest among students for reading and they see it as something difficult because it is not in their first language. These facts can be seen in the following fragments that were taken from the teacher's journal:

"... The lesson was organized in three stages; the pre, while and post reading tasks... I consider that the way the class is planned is appropriate and it is thought to make sure students have enough support to perform well".

"During the initial part when I announced that we were working on a reading task, some students made some rejecting gestures; in general they don't like reading not even in the first language so they consider reading in a foreign as something difficult".

The reflection also provides evidence of some of reading strategies students use when they approach reading tasks; in this case, there is a predominance of support and problem solving

reading strategies. Students have a clear tendency to use the dictionary or to translate into their first language to be able to perform the activities. Additionally, the teacher states that because of the excessive use of dictionary they spend too much time in one single activity. These facts are indicators of some limitations students have when the work on reading. This can be appreciated as follows:

“For the first activity which was matching a list of words with their definition they immediately started struggling with the vocabulary; the first thing they did was start asking for translations. Almost all of them took out the dictionary or their mobiles in order to look for word. They didn’t even checked or try to match using keywords. Very few of them did this. In fact it took so long for them to complete this task. During the lesson they keep asking me about definitions and for help and in short conversations with them they said that the first thing they do when they are going to read is to translate to their first language”.

“The main strategy they use is translation whenever they read”.

“However they still were too dependent to their dictionaries or to the teacher to translate words or phrases from the text”.

“On the other hand, it is important to think about ways to teach them how to deal with texts having more options that only translating for them to comprehend”.

After matching learning styles to reading activities. Comparing the information obtained in the first teachers’ reflection journal, this one provides different information about students’ perceptions towards reading activities and the reading strategies they use to approach texts. In this sense, there are highlighted differences. The teacher states that this class was better in terms of planning. In the same way, the activities were varied and more interesting to students and time management improved. This is evident in the following piece of transcription from his journal.

“In this class session there were many positive elements from my perspective; first it was better planned that previous classes and so students had more support throughout the activities done. In the same way, the activities varied in styles and ways of presenting class materials so every student needs were met and the class

was very active. Another thing was that in terms of time management students did better”.

The teacher also made a reflection in which he declares that when students’ learning styles are matched to reading activities, pupils’ attitudes towards reading turned more positive as well as their perceptions . Evidence of this is the following extract:

“This class was also planned taking into account most predominant students’ learning styles that were identified in previous lessons using a questionnaire that is why the activities were always trying to match as much learning styles as possible”.

“Although the activity consisted on reading information and pictures they did not show apathy towards it, in fact they were very curious because what they were reading and looking at was created by them so it was motivating for them”.

“It is also important to say that they always participated eagerly and whenever they shared answers they did very well. Students also felt more confident and almost nobody perceived the activities as something difficult”

Concerning the reading strategies, they used during this lesson, it is important to remark that there are also some differences. There is a clear reduction in the use of the dictionary and translations as the main resource to deal with text. On the other hand, other kind of strategies like global, appeared. This is an indicator that when learning styles are matched, the activities themselves provide additional support that can replace some basic strategies and improve pupils’ performance; in the same way, it could be said that students are more aware and benefit more from some other options to approach texts. These facts can be evident in the following journal fragments.

“Something important to remark was that during the whole session there was little used of the dictionary which means that the way the activities were presented gave the support and helped them to grasp and understand more information”.

“It was noticed that in this case that the additional support provides throughout the activities replace some actions they used to do when they were reading and

used another strategy that let them perform better”.

“It is also important to say that they always participated eagerly and whenever they shared answers they did very well. Students also felt more confident”.

Data Triangulation

For giving credibility to the research, pieces of data from each data collection tool was carefully selected and triangulated in the following chart; the purpose was to find common patterns coming from different data sources related to the same issues. The issues are defined from two research questions and from the objectives. The table below shows the information organized.

Issues	Reading perceptions before and after matching students' learning styles to reading activities	Changes in students' reading strategies before and after matching pupils' learning styles to reading activities
Data Source		
MARSI Questionnaire	This instrument does not provide data about this issue.	Information gathered throughout this instrument shows changes in reading strategies used by focus and target group when their learning styles are matched. When there is lack for matching they use more problem solving and support strategies. On the other hand, where there is matching it exits a predominant use of global strategies.
Students' Reading Perception Questionnaire	There were found changes in students' perceptions towards reading. According to the results, it is evident that when students' learning styles are matched, their perceptions towards reading activities change in general from negative to positive.	This instrument does not provide data about this issue.
Class Audio Recording	Similar to results obtained in the previous tool, the transcribed prompts of students showed direct evidence of using some specific reading strategies before and after marching students' learning styles. In the first situation the tendency was to perceive reading as something difficult; in the second one there were pupils' comments that indicated positive changes.	The analysis of students' verbal interaction during the English class showed some evidences of the reading strategies they use before and after matching their learning styles to reading activities. In the first case, it was common among the use of dictionary or translation (support) ; in the second one was less used and they focused on more general aspects of the text (global strategies)

Teacher's Reflective journal	<p>Teacher reflection about the situations presented in both moments; not and matched shows that from teachers' perspectives, reading is something boring and difficult for students; however, when their learning styles are matched there was an increased in participation and the classroom climate was better. These two findings are evidence of positive variations.</p>	<p>The data collected from this reflection showed similar results. When learning styles were not matched, there was a predominance of support and problem solving reading strategies. Students had a clear tendency to use the dictionary or to translate into their first language to be able to perform the activities. When learning styles were matched, There was a clear reduction in the use of the dictionary and translations as the main resource to deal with text. On the other hand, started emerging other kind of strategies like global</p>
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Table 8: data triangulation

Table 6 presents pieces of information from each data source; it is presented relevant evidence to address the two issues stated above in the chart that are derived from the research questions and objectives. Having analyzed and placed the information, it can be said that during the triangulation process important facts were found similar in data sources; this helped researchers to give validity to the findings. It is important to remark, that some results from the quantitative data were found similar to the qualitative data. During this triangulation, they were integrated so that better support could be made to prove and give reliability to the findings.

Discussion and Conclusions

In this section of the paper, the discussion of main findings is presented. Important conclusions drew from the research and their pedagogical implications as well as some limitations and suggestions for further studies, will be also part of this chapter.

The results got from this research study clearly confirmed the importance of understanding and matching pupils' learning styles to class reading activities, as they provided insights for understanding that classroom successfulness in the reading skill partially depends on meeting students' ways of learning through the activities the teacher brings to the classroom to promote learning, (Oxford, 2003). Two aspects are found to be potentially improved if teacher takes into account this premise: the generalized negative perceptions students have towards reading and positive changes in the use of reading strategies to approach reading activities which might suggest better use of reading strategies since the reading event was potentiated in terms of time and achievement. Results from perceptions questionnaires and reading strategies questionnaire, both applied before and after matching students learning styles clearly show changes in these two aspects. In the same way, data gathered through class audio recording and teachers' reflective journal also confirms what have been stated.

Improving the effectiveness of using reading strategies and students' perceptions towards reading might have positive implications on developing reading skills and students' general academic performance; two data collection procedures provide evidence for these premises: class audio recording and teacher' reflective journal. In both cases, students' prompts when participating in class and teacher's reflection agreed on better reading performance when learning styles were matched to reading activities, Dunn (1983) and Keefe and Ferrell (1990). In

this sense, evidence from the data obtained showed an increase in students' turns when participating correctly in class. In the same way, time management for reading activities was also improved. In relation to their perceptions towards reading, the results from perceptions questionnaire, the audio recording and teachers' reflection journal have coincidences in changes from negative to positive. This finding confirmed Dunn's (1983), statement that dramatic improvement in students' achievement exists in cases where learning styles have been taken into account. Thus, considering Chuah Chong-Cheng's (1988) learning styles are not only important but also necessary in academic settings.

In general, there is a link between students' learning styles and the way they perceive the learning environment in general. Therefore, it implies that matching pupils' ways of learning to class activities has an impact on the way they perceive reading tasks. Results from the perceptions questionnaires demonstrate that when learning styles are matched, there is a tendency to conceive reading and reading activities in more positive way. Literature also support this statement; According to Junko (1998), as cited in Zainol et al., 2011, p. 144) "Learners having different learning style preferences would behave differently in the way they perceive, interact, and respond to the learning environment." In the present study, positive changes in students' perceptions towards reading were found when there was the existence of matching pupils' most predominant preferred ways of learning. This fact confirms the importance of this theory in school academic settings.

The existing relationship between learning styles and the reading skill was also found through this study. Data collected demonstrate changes in the reading strategies used by students and in their perceptions towards reading when their learning styles were matched to reading activities. Therefore, these changes are evidence of the influence mentioned above. Considering

the fact that the way the reading process carried out, is determined by each individual characteristics, background knowledge and way to approach the skill, it has close relationship with learning styles. This fact is supported by Grabe (2009), for whom reading implies a relation between individuals' background conceptions, the characteristics of the text and the knowledge of the reading procedures. All this in a general aspect, constitute the interaction with the texts' characteristics and individual cognitive process; this las one implies considering students' learning styles. In the same way, (Weaver, 2009, p. xii) claims that "reading is a process very much determined by what the reader's brain, emotions and beliefs bring to the reading. Thus, matching students' learning styles to reading activities affect the reading process itself. According to Olsson (2009), reading is primarily visual; thus, it is directly connected to this perceptual learning style. In the same way, she claims that when reading is adapted to each student's learning style and individual strengths, this lead to better results.

Results also showed a close relationship between students' learning styles and the reading strategies selected when carrying out a reading task. Reading strategies questionnaire applied before and after matching students' learning styles to reading activities showed that in general, students tend to use strategies to support and solve problems during the reading event when there is lack of learning styles matching. On the other hand, when learning styles are matched, they use more global strategies. Better text understanding and time management are evidence of this; data from class audio recording and teacher's reflection journal confirm this fact. In this sense, matching students learning styles shape the kind of strategies students used to perform the reading activities. Literature on this issue advocates that one crucial element to take into account to have a successful performance when reading are the strategies used to carry out the reading event; then, if reading is closely connected to students' learning styles, there is a direct influence

between these two elements. According to Sadeghi et.al (2012), current research on learning styles, showed that there is a relationship between personality types of the learners, the way they establish their learning styles and their success in language learning. On the other hand, both theoretical and empirical studies showed the relationship and the effect of personality on reading comprehension. Since reading strategies emerge automatically when reading takes place, the relationship between learning styles, reading strategies and reading performance might be apparently valid. Additionally, Oxford (2003) states that language learning styles and strategies are among the main factors that help determine how –and how well –our students learn a second or foreign language.

To conclude, it can be said that the study met and gave answers to the research questions and goals proposed. In relation to question 1 about what 11th graders' major, minor, and negligible learning styles were, it was found that the most popular modality was the kinesthetic learning style; this implies that the activities that best match their learning styles are the ones that imply movement when learning; in this sense, activities like rehearsing role plays and presenting activities related to movement like mime, guessing games, touching and expressing their feelings physically. It was also found that when these kinds of activities were used by the teacher in the class, there were higher level of motivation and students actively carried out the task having good academic results.

Subquestion 2 intended to find information about changes in students' perceptions towards reading when their learning styles were matched to reading activities in the English class. Evident implications on pupils' perceptions were found; this influenced student's perceptions positively and improved the classroom academic environment and students' performance.

Subquestion 3 inquired about how matching students' learning styles to reading activities shaped the reading strategies they used to approach texts in the English class. It can be concluded that when students learning styles are matched to reading activities, there are significant changes in the kind of strategies they use to approach texts. In this sense, the tendency is to change from problem solving and support to global. The implications of this situation suggest that considering learning styles in classrooms settings give students additional support and replace some kind of reading strategies, allowing them to better benefit from others.

Additionally to the research conclusions, results also showed that knowing students' learning styles not only had advantages concerning the academic performance, but also on students' attitude and motivation towards the learning process; this implies that the way class activities are presented and planned has a strong influence on students personal behavior; consequently, it is right to assert that one lesson can be attractive to students if its activities are presented and match his/her interests. Strong connections were found between students learning styles and motivation; in this way, that fact that teachers could be aware of pupils' preferred ways of learning, have a positive impact on learners' motivation towards the class.

In sum, teachers are responsible to take into consideration the differences in learning styles among students to favor students' successful learning. When teachers are aware of the importance of learning styles, they can provide a good learning map to their students.

Pedagogical Implications

The theories of learning styles in English language teaching are key elements to improve the teaching and learning process; in this way, teachers might consider the following implications as insights to understand and apply these theories into the class:

- ✓ Teachers should be aware that students learn differently, which should make them aware that they have to approach teaching from different perspectives.
- ✓ To improve the teaching and learning process, it is important to know students' learning styles; for this, a translated version of the PLSPQ questionnaire can be used.
- ✓ Learning styles theories applied in school curricula can significantly improve pupils' academic achievement and performance in the reading skill and help to have better perceptions about skills they tend to think that are difficult.
- ✓ Planning teaching activities according to students' learning styles has a positive impact on learners' reading performance.
- ✓ Matching students' learning styles is a good way to enhance motivation.

Finally, it would be relevant to consider for further research the fact that if students know their learning styles, learning strategies can be fostered and self-learning could be promoted. In the same way, it could be relevant for further implementation of the theory of learning styles to take into account that it may have some limitations to be implemented in large groups; therefore, research in this field could provide more insights to deal with this issue.

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Appendixes

Appendix 1: Test De Estilo De Aprendizaje De Estudiantes

El objetivo de esta encuesta es identificar el estilo de aprendizaje de los 37 estudiantes del grado 11 de una Institución Educativa pública en la costa caribe colombiana.

Nombre: _____ Edad: _____ Sexo: _____ Grado: _____ Grupo: _____

INSTRUCCIONES: Lee cada una de las afirmaciones de la 1 a la 30, luego responde con rapidez según corresponda para tu caso en la clase de inglés . No cambies las respuestas una vez que hayas respondido. Usa lapicero.	Totalmente de acuerdo	De acuerdo	Indeciso	Desacuerdo	Totalmente en desacuerdo
1.- Entiendo mejor si el maestro da las instrucciones.	5	4	3	2	1
2.- Prefiero aprender haciendo algo en clase.					
3.- Avanzo más en mis tareas fuera de clase si trabajo con otros.					
4.- Aprendo más cuando estudio con un grupo.					
5.- En clase, aprendo mejor si trabajo con otros.					
6.- Aprendo mejor leyendo lo que la maestra anota en el tablero.					
7.- Aprendo mejor cuando alguien me dice cómo hacer algo en clase.					
8.- Cuando construyo modelos de algo, organizo posters u otro tipo de material a usar en clase aprendo mejor.					
9.- Aprendo mejor cuando escucho la información en clase, que cuando la leo.					
10.- Cuando leo instrucciones las recuerdo mejor.					
11.- Aprendo mejor si puedo hacer una maqueta de algo.					
12.- Entiendo mejor cuando leo instrucciones.					
13.- Recuerdo mejor las cosas cuando estudio solo.					
14.- Aprendo más cuando hago un trabajo escrito para la clase.					

15.- Disfruto aprender por medio de trabajos que impliquen moverme dentro del aula de clase o por fuera de ella (juegos, dramas)					
16.- Aprendo mejor si hago dibujos de lo que voy estudiando.					
17.- Aprendo mejor si el maestro da su clase exponiendo.					
18.- Cuando trabajo solo aprendo mejor.					
19.- Entiendo mejor las cosas en clase si participo en juego de roles / dramatizaciones.					
20.- Aprendo mejor en clase si escucho a alguien.					
21.- Disfruto hacer las tareas con dos o tres compañeros.					
22.- Cuando construyo algo, recuerdo mejor lo que aprendí.					
23.- Prefiero estudiar con otros.					
24.- Aprendo mejor cuando leo, que cuando escucho a alguien.					
25.- Disfruto hacer actividades escritas a un trabajo de clase.					
26.- Obtengo mayor provecho de la clase si participo en actividades afines al tema tratado.					
27.- En clase, trabajo mejor si trabajo solo.					
28.- Prefiero hacer mis trabajos solo.					
29.- Aprendo mejor leyendo libros que escuchando exposiciones orales.					
30.- Prefiero hacer mis trabajos por mí mismo.					
Taken from Serrano (2003) who made the translation form Reid's Perceptual Learning Styles Preference Questionnaire (PLSPQ) for EFL/ESL students (1984)					

SCORING SHEET

Instructions

There are 5 questions for each learning category in this questionnaire. The questions are grouped below according to each learning style. Each question you answer has a numerical value:

Strongly Agree (SA) = 5

Agree (A) = 4

Undecided (U) = 3

Disagree (D) = 2

Strongly Disagree (SD) = 1

Fill in the blanks below with the numerical value of each answer. For example, if you answered Strongly Agree (SA) for question 6 (a visual question), write a number 5 (SA) on the blank next to question 6 below.

Visual

6 - 5

When you have completed all the numerical values for Visual, add the numbers. Multiply the answer by 2, and put the total in the appropriate blank.

Follow this process for each of the learning style categories. When you are finished, look at the scale at the bottom of the page; it will help you determine your major learning style preference(s), your minor learning style preference(s), and those learning style(s) that are negligible.

VISUAL	AUDITORY	TACTILE	GROUP	KINESTHETIC	INDIVIDUAL
6 - _____	1 - _____	11 - _____	3 - _____	2 - _____	13 - _____
10 - _____	7 - _____	14 - _____	4 - _____	8 - _____	18 - _____
12 - _____	9 - _____	16 - _____	5 - _____	15 - _____	27 - _____
24 - _____	7 - _____	22 - _____	21 - _____	19 - _____	28 - _____
29 - _____	20 - _____	25 - _____	23 - _____	26 - _____	30 - _____
Total_____ x2	Total_____ x2 =	Total_____ x2	Total_____ x2	Total_____ x2 =	Total_____ x2
=	_____(Score)	=	=	_____(Score)	= _____(Score)
_____(Score)		_____(Score)	_____(Score)		

Major Learning Style Preference 38-50

Minor Learning Style Preference 25-37

Negligible 0-24

Appendix 2: Cuestionario De Estrategias De Lectura De Estudiantes

NOMBRE: _____ **EDAD:** _____ **SEXO:** _____ **GRADO:** _____ **GRUPO:** _____

El propósito de esta encuesta es recolectar información acerca de las diferentes estrategias de lectura que usas cuando lees material académico en el área de inglés. Para cada ítem marcarás tu respuesta en una escala de 1 a 5, las cuales significan lo siguiente:

- 1:** nunca o casi nunca lo hago
- 2:** lo hago solo ocasionalmente
- 3:** algunas veces lo hago (cerca de 50% de las veces)
- 4:** lo hago usualmente
- 5:** lo hago siempre o casi siempre

Lee atentamente cada ítem y marca por favor, el número que se aplica a ti. Ninguna respuesta es correcta o incorrecta. Gracias por tu colaboración

N°	ITEM	ESCALA				
1	Tengo un propósito en mente cuando leo	1	2	3	4	5
2	Tomo notas cuando leo para ayudarme a comprender lo que leo	1	2	3	4	5
3	Pienso acerca de lo que sé para ayudarme a comprender lo que leo	1	2	3	4	5
4	Doy un vistazo general al texto para saber de qué se trata antes de leerlo	1	2	3	4	5
5	Cuando el texto es difícil o complejo, leo en voz alta para ayudarme a comprender lo que leo	1	2	3	4	5
6	Pienso si el contenido del texto concuerda con el propósito que tengo cuando leo	1	2	3	4	5
7	Leo despacio y cuidadosamente para asegurarme de que comprendo lo que leo	1	2	3	4	5
8	Reviso el texto identificando sus características como extensión y organización textual antes de leer	1	2	3	4	5
9	Trato de regresar en el texto para tomar el hilo nuevamente cuando pierdo la concentración	1	2	3	4	5
10	Subrayo o encierro información para ayudarme a recordarla	1	2	3	4	5
11	Ajusto la velocidad de lectura de acuerdo con lo que leo	1	2	3	4	5
12	Cuando leo, decido en que concentrarme y que ignorar	1	2	3	4	5
13	Uso material de referencia (diccionario) para ayudarme a comprender lo que leo	1	2	3	4	5
14	Cuando el texto es difícil o complicado, leo cuidadosamente para comprender lo que leo	1	2	3	4	5
15	Uso tablas, figuras e imágenes del texto para incrementar mi comprensión	1	2	3	4	5
16	Hago pausas entre periodos de tiempo para pensar sobre lo que estoy leyendo	1	2	3	4	5

17	Uso pistas en el contexto del texto que me ayuden a comprender lo que estoy leyendo	1	2	3	4	5
18	Parafraseo ideas del texto (reafirmo ideas con mis palabras) para comprender mejor lo que leo	1	2	3	4	5
19	Trato de imaginar o visualizar la información para ayudarme a comprender mejor lo que leo	1	2	3	4	5
20	Uso características tipográficas del texto como texto en negrita y cursiva para identificar información relevante	1	2	3	4	5
21	Analizo y evaluó críticamente la información presentada en el texto	1	2	3	4	5
22	Cuando leo voy atrás y adelante del texto para encontrar relaciones entre las ideas presentadas en el texto	1	2	3	4	5
23	Hago revisión de mi comprensión cuando aparece nueva información	1	2	3	4	5
24	Trato de adivinar cuál es el contenido del texto cuando leo	1	2	3	4	5
25	Cuando el texto se torna complicado, vuelvo a leerlo para incrementar mi comprensión	1	2	3	4	5
26	Me hago preguntas que me gustaría haber respondido del texto	1	2	3	4	5
27	Reviso para saber si mis predicciones del texto estuvieron correctas o incorrectas	1	2	3	4	5
28	Cuando leo, adivino el significado de las palabras o frases desconocidas	1	2	3	4	5
29	Cuando leo, traduzco del inglés al español	1	2	3	4	5
30	Cuando leo, pienso en la información en ambas lenguas; inglés y español	1	2	3	4	5
Taken and translated from Kouider Mokhtari and Ravi Sheorey (2002) SCORING GUIDELINES FOR THE SURVEY OF READING STRATEGIES						

1. Write the number you circled for each statement (i.e., 1, 2, 3, 4, or 5) in the appropriate blanks below.

2. Add up the scores under each column and place the result on the line under each column.

3. Divide the subscale score by the number of statements in each column to get the average for each subscale.

4. Calculate the average for the whole inventory by adding up the subscale scores and dividing by 30.

5. Use the interpretation guidelines below to understand your averages.

Global Reading Strategies (GLOB Subscale)	Problem Solving Strategies (PROB Subscale)	Support Reading Strategies (SUP Subscale)	Overall Reading Strategies (ORS)
-------------------------------------------------	--------------------------------------------------	-------------------------------------------------	-------------------------------------------------

1. _____ 3. _____ 4. _____ 6. _____ 8. _____ 12. _____ 15. _____ 17. _____ 20. _____ 21. _____ 23. _____ 24. _____ 27. _____	7. _____ 9. _____ 11. _____ 14. _____ 16. _____ 19. _____ 25. _____ 28. _____	2. _____ 5. _____ 10. _____ 13. _____ 18. _____ 22. _____ 26. _____ 29. _____ 30. _____	GLOB _____ PROB _____ SUP _____
_____ GLOB Score	_____ PROB Score	_____ SUP Score	_____ Overall Score
____/ 13	____/ 8	____/ 9	____/30
_____ GLOB Average	_____ PROB Average	_____ SUP Average	_____ Overall average

KEY TO AVERAGES:

- 3.5 Or higher = High
- 2.5 – 3.4 = Medium
- 2.4 Or lower = Low

INTERPRETING YOUR SCORES

The overall average indicates how often you use reading strategies when reading academic materials. The average for each subscale shows which group of strategies (i.e., Global, Problem Solving, or support strategies) you use most often when reading. It is important to note, however, that the best possible use of these strategies depends on your reading ability in English, the type of material read, and your reading purpose. A low score on any of the subscales or parts of the inventory indicates that there may be some strategies in these parts that you might want to learn about and consider using when reading (adapted from Oxford 1990, pp. 297-300).

Appendix 3: Cuestionario De Percepciones De Estudiantes Sobre Actividades De Lectura

NOMBRE: _____ **EDAD:** _____ **SEXO:** _____ **GRADO:** _____ **GRUPO:** _____

El propósito de esta encuesta es recolectar información acerca de las percepciones que tienen los estudiantes sobre las actividades de lectura en clases de inglés. Para cada ítem marcarás tu respuesta en una escala de 1 a 5, las cuales significan lo siguiente:

- 1:** totalmente de acuerdo
- 2:** de acuerdo
- 3:** indeciso
- 4:** desacuerdo
- 5:** totalmente en desacuerdo

Lee atentamente cada ítem y marca por favor, el número que se aplica a ti. Ninguna respuesta es correcta o incorrecta. Gracias por tu colaboración

N o	ITEM	ESCALA				
		1	2	3	4	5
1	Las actividades de lectura en clase me parecen fáciles	1	2	3	4	5
2	El tiempo que necesito para completar las actividades de lectura en clases es adecuado de acuerdo a las actividades	1	2	3	4	5
3	Encuentro las actividades de lectura en clases interesantes	1	2	3	4	5
4	Me es fácil resolver actividades de lectura cuando tengo un diccionario	1	2	3	4	5
5	Considero que el tiempo de clases es suficiente para completar actividades de lectura	1	2	3	4	5
6	Las actividades de lectura propuestas por el docente son de mi interés	1	2	3	4	5
7	El material usado (textos) para realizar las actividades de lectura es adecuado para mi nivel	1	2	3	4	5
8	Encuentro cierto tipo de actividades de lectura menos complejas que otras	1	2	3	4	5
9	Las actividades de lectura son necesarias dentro y fuera del aula de clase	1	2	3	4	5
10	Me identifico y me es fácil realizar todo tipo de actividades de lectura	1	2	3	4	5
11	La extensión de los textos propuestos por el docente, generalmente no	1	2	3	4	5

	define si la actividad es fácil o difícil					
12	Las actividades de lectura trabajadas en clase no solo me sirven para obtener buenas o malas notas. También me ayudan a desarrollar mi pensamiento critico	1	2	3	4	5
13	Las actividades de lectura dentro del aula contribuyen al desarrollo de competencias que me son útiles en otras asignaturas y/o la vida cotidiana	1	2	3	4	5

SCORING GUIDELINES FOR THE *SURVEY OF STUDENTS' PERCEPTIONS ABOUT READING ACTIVITIES IN THE ENGLISH CLASSES*

1 _____
2 _____
3 _____
4 _____
5 _____
6 _____
7 _____
8 _____
9 _____
10 _____
11 _____
12 _____
13 _____
Total: _____

Students' answers will be added in order to have a total so that we can classify their perceptions into positive, neutral or negative, as follows:

0 – 26 negative
 27 – 39 neutral
 40 – 65 positive

Appendix 4: Audio Recording Transcript – Class N°1**Lesson 1****Date:** May the 2nd / 2016**Time:** 60 Minutes**Grade:** Eleventh**Purpose:** to analyze students' interactions during the English class to observe how they react to reading activities, how they perform them and how do they deal with them when their learning styles are not matched.

GRADE: 11TH				
Class 1 before matching students' learning styles to reading activities				
			Class stage	Comments
34.	T	Eh, ok good morning, this is... today is may the second, this is a class with eleventh A. ok guys, let me check attendance very quickly	Introduction Pre-reading	The teacher checked students' attendance
35.	T	So am... today we are going to work... this is a reading activity, so the first activity is a matching about some vocabulary, un vocabulary del text que van a leer, Pero primero van a a hacer un matching so you can identify some words that they are gonna be useful for the reading and after that hay some reading comprehension questions based on the reading and at the back of the paper there are the rest of the questions. At the end there is a kind of task como una homework que van a hacer similar to the reading but a little bit different right? Bueno, entocen lo primero que van a hacer es... you receive the paper you write down your name and start checking the matching, como van a hacer el matching? Tenemos las words y tenemos las definitions, cada word tiene un número assigned cierto? Pero las definitions están disorganized es decir no corresponden a la word, entonces ustedes lo que van a hacer es que a cada definition le van a escribir en frente the number of the Word so you can match the definition		The Teacher announced what the class is going to be like and give instructions to students in english and Spanish mixing both languages while he speaks
36.	Ss	Number correct you can use it		The students start asking the teacher for meanings and some of them say they don't understand the activity so the teacher start explaining the activity again,
37.	T	The correct number, yes		
38.	S1	Yes teacher que significa useful		
39.	T	Ya te digo		
40.	S1	Teacher respondame		
41.	S1	Que si que significa useful		
42.	T	Useful? Es algo que es muy útil		
43.	Sx	Teacher can you tell me the definition of this word?		
44.	T	Something that you ca use		
45.	Sx	Teacher no entiendo esto		

46.	Ss	Thank you		this time slower and using more Spanish
47.	Ss	Thank you teacher		
48.	T	Ok, I'll give instructions again regarding to the matching pay attention Pedro, tenemos las words de este lado cierto, cada word tiene un numero asignado assigned si? En frente están las definitions pero esas defitinitios no corresponden a la Word que tienen en frente, entonces para hacer al matching tu tienes que buscar por ejemplo la palabra acient cual es la definition para ella y en frente de la definición, de este lado aca you putt he number right?		The Teacher keeps explaining the initial activity to the studnets so they can start working
49.	Sx	Yes		
50.	T	Ok that's it hands on work		
51.	Sx	Teacher		
52.	T	Yeahh?		
53.	Sx	Las palabras son del text?		
54.	T	Actually the words are from the text, miren que las words, the same words are in the text in bold, in negrita		
55.	S1	Ahhh pero entonces ahi está el significado		
56.	T	Sorry?		
57.	Ss	Teacher cuando vamos a sacar los resultados de la prueba		
58.	T	For next class		
59.	Ss	Y hay que meterla el portafolio		
60.	T	Yes of course		
61.	T	As soon as i grade it i'll give it back to you so you can add it to the portfolio		
62.	Ss	Profe, oh teacher puedo usar google traductor		
63.	T	Si tu quieres		
64.	T	Chicos ((claps) se supone que estan reading so you must be in quiet in complete silence right?		
65.	Ss	Teacher esto es un quiz		
66.	T	It is not a quiz Lisay, it is only if you are Reading you may be quiet		
67.	S3	Teacher este texto aqui este que hago con este texto aqui correspondiente a esta palabras que estan aqui		
68.	T	Lo primero que vas a hacer es el vocabulario		
69.	S3	Pero quiero saber para qué es este texto		
70.	S1	Pero si no sabemos el significado		
71.	T	Para la actividad de comprensión		
72.	S3	Ah ahora si entiendo		
73.	T	Simplemente que antes de leer el texto vamos a contextualizarnos mas en cierto vocabulario que te va a servir para comprender mas lo que vas a leer, ose que antes de la actividad de lectura como tal, esamos haciendo una actividad de prelectura que te va a servir para la actividad de lectura		

74.	S3	Ah thank you		
75.	T	Ok you're vey welcome		
76.	T	Ok tell me		
77.	S1	Que no entiendo el significado de estas palabras		
78.	T	Bueno, cual es una estrategia que puedes utilizar asi no sepas todo en ingles que podrias utilizar?		
79.	S1	Leer el texto		
80.	T	Leer el texto es una cierto como dice ana Milena, es decir si la misma palabra están aca de pronto puedes buscar en el texto alguna clue, pista que te ayude a identificar el significado, si no que puedes hacer?		
81.	S1	Osea como que relacionar esto con esto que que va aca		
82.	T	Exacto buscar una key Word		
83.	S1	Pero y si no se que singnifica esto		
84.	T	Bueno y si no sabes que haces entonces		
85.	S1	Buscar un diccionario		
86.	T	Ok so use the dictionary		
87.	Ss	Teacher oh teacher, y puedo utilizar el celular para buscar en el traductor		
88.	T	Si claro, pero solo para eso o puedes ir a la biblioteca a buscar uno		
89.	Ss	Ok Teacher		
90.	T	Hans up if you need a dictionary ((counting students) ... 13 dictionaries go mr.		
91.	T	Y sin diccionario no puedes hacer nada?		
92.	S3	No porque tengo que buscar los significados para entender		
93.	Sx	Teacher estas preguntas hay que responderlas?		
94.	T	Ye but after you finish the matching activity		
95.	Sx	Y no puedo ir haceindo la otra?		
96.	T	Y o vas a hacer el matching?		
97.	Sx	Es que la otra me gusta mas, me llama mas la atención		
98.	T	Ok work as you prefer		
99.	T	Student 2 como vamos		
100.	S2	Good teacher, good good		
101.	T	What's good		
102.	Sx	Esperando que vengan los diccionarios		
103.	S2	Si, eso		
104.	T	Se sienten muy maniatados si no tienen el diccionario?		
105.	S2	Ps mas o menos Teacher		
106.	T	Ose que son totalmente dependientes del diccionario		
107.	Sx	Nooo tampoco		
108.	T	Por ejemplo que podrías hacer para ir adelantando mientras llegan los diccionarios		
109.	S2	Ir asociando esto con esto		
110.	T	That could be a way, associating and look for key words		
111.	T	Como vamos?		
112.	Sx	Empezando		

Students repeatedly ask for using the dictionary in order to know words.

113.	T	Que es lo primero que estás haciendo		
114.	Sx	Use the dictionary and Reading the text		
115.	T	Cuando recibiste la actividad, cual fue tu primera impresión?		
116.	S1	Ps no se empecé a mirar si sabía los significados de las palabras y leí el texto para ver si me da pista y podía identificarla		
117.	Sx	Espere Teacher un segundo es que ... un minuto		
118.	Sx	Alguien tiene una hoja		
119.	Sx	Para qué?		
120.	S1	Para escribir lo que significa		
121.	T	Para tomar notas		
122.	S1	Yes Teacher		
123.	S1	Que significa ???		
124.	Sx	Shape que es forma, forma de que de un campo de futbol?		
125.	T	But foot ball not the fiel but the ball		
126.	T	Did you read the text?		
127.	Sx	No		
128.	T	How are you going to answer if you haven't read the text		
129.	T	Ok I am going to help you with some definitions. For example let's try together ancient that's number 1, what is that?		
130.	S1	Antiguo		
131.	Sx	Come from a long period, having lasted for very long time		
132.	T	Yeah, very good		
133.	Sx	Cual es? Cual es?		
134.	T	having lasted for very long time. Helmet, what is that?		
135.	Sx	A strong hat that covers and protects you head		
136.	T	Ok, very good. Now whistle		
137.	Sx	Techer me		
138.	T	Ok go ahead		
139.	S1	An object used to produce a sound		
140.	T	Now, supportive		
141.	S1	Es que no sé cómo pronunciar la palabra		
142.	T	But try		
143.	S1	Giving help or encourament		
144.	T	Emmm grip, the definition		
145.	Sx	Apretón		
146.	T	Kind of		
147.	Sx	Teacher, to hold very tightly		
148.	T	Good, now we continue with equipment		
149.	Sx	Teacher, teacher		
150.	T	Ok go ahead		
151.	Sx	The set of necessary tools for a particular purpose		
152.	T	Excellent, the next one, stitch		
153.	Sx	Puntada?		

Some students start taking note to help themselves to remember information and answer the activity

The teacher direct students so they can get the answers and the class start sharing the answers for the initial activities

154.	T	No, it is not		
155.	S1	a piece of thread sewn in cloth, or the single movement of a needle and thread into and out of the cloth which produces this		
156.	T	Very good, beginning		
157.	S1	The first part of something or the start of something		
158.	T	Good, pad		
159.	Sx	a piece of soft thick cloth or rubber which is used to protect a part of the body, give shape to something or clean something		
160.	T	That's correct. Develop		
161.	Sx	To invent something or bring something into existence		
162.	T	Good, half		
163.	Sx	Teacher, either of two periods of time into which a game is divided		
164.	T	Good, and finally leather		
165.	Ss	animal skin treated in order to preserve it, and used to make shoes, bags, clothes, equipment, etc		
166.	T	Muy bien, so now you are going to read the text and answer the questions, multiple choice	Reading task	While reading, students keep asking the teacher for words or are using the dictionary to look for meanings
167.	Sx	Que es each		
168.	T	Cada		
169.	Sx	Teacher a question, all of this es como todos ellos?		
170.	T	Si		
171.	Sx	Oh teacher, esto aqui significa desde el siglo 19?		
172.	T	In the 19 century, in in		
173.	Sx	En el siglo 19		
174.	T	Exactly		
175.	T	What are you doing?		
176.	S1	Reading the text		
177.	T	Que fue lo primero que hiciste		
178.	S1	Leer todo el texto y buscar algunas palabras		
179.	Sx	Teacher esta question dice que forma tiene el football?		
180.	T	No, the football the ball used in the game		
181.	Sx	Teacher que es esto?		
182.	T	Kicking		
183.	Sx	Pateando		
184.	T	Yeah		
185.	T	It is said that soccer and rugby inspired American football		
186.	Sx	Teacher yo respondo la 1 la 2 y la 4		
187.	T	Mr how are you doing		
188.	S2	Tratando de traducir el texto para responder		
189.	T	Y sin traducir no puedes contestar?		
190.	S2	De pronto si		
191.	Sx	Por si la informacion esta alli, porque la pregunta esta en el texto entonces yo busco lo que dice la pregunta y la parte en el texto en ingles y ahi esta la respuesta		
192.	Sx	Teacher Please		

193.	T	Tell me		
194.	Sx	Esta pregunta dice porque los jugadores usan protection?		
195.	T	Yes		
196.	Sx	Teacher viene aca por favor		
197.	T	Miss?		
198.	Sx	Que dice aca, es que la pregunta dice la pregunta es cual es el mas famoso de que		
199.	T	Juego cada año		
200.	Ss	Ammm		
201.	Sx	Teacher No entiendo que quiere decir esto		
202.	T	The oringin or beginning osea el inicio of football was in Greece		
203.	Sx	Teacer esta Buena la respuesta de la 7		
204.	T	Tienes evidence in the text		
205.	Sx	Pero aja ahi dice por aqui		
206.	T	So it is correct		
207.	Ss	Que forma es el football		
208.	T	No the game, the ball		
209.	Ss	Ah, la forma de la pelota		
210.	Ss	Entices es rectangular		
211.	Ss	Nooo oye es ovalada ahí dice en el texto mira oval		
212.	Sx	El texto te esta habalndo de football americano		
213.	T	Como van		
214.	Ss	Bien Teacher, estamos respondiendo leo y busco y leo otra vez		
215.	T	Finished		
216.	Ss	No		
217.	T	ok hurry up		
218.	Ss	Teacher ya ya		
219.	Sx	Que si que hacen los oficiales durante el juego, eso es lo que dice esa pregunta		
220.	Sx	Bueno entonces es la b		
221.	T	Read the 4th paragraph for the answer		
222.	S1	Professor esto es para proteger su cuerpo		
223.	T	Yes to keep their body safe		
224.	Sx	Teacher aqui nos dice que varias personas juegan football, osea que la resppuesta es la a		
225.	T	That's correct		
226.	S2	Profesor que raduce collage students		
227.	T	Collage students son estudiantes de universidad		
228.	T	Miss lo mas difícil y lo mas fácil de hacer el ejercicio		
229.	S1	Pues yo creo que la comprensión porque esta en ingles y hay muchas palabras desconocidas y tuve que buscar en el diccionario y lo fácil no se ya con las palabras lo fui desarrollando fácilmente		
230.	T	Mr. lo mas complicado que fue		
231.	S2	La traducción del texto aunque y fácil que uno busca en el texto y responde de allí como con palabras claves		

232.	Sx	Con las palabras que estaban en el vocabulario de la la primera actividad		
233.	T	Ok that's it everybody pay attetion, let's check the answers		Students have finished the reading task and the whole class shares the answers. The majority of students participate
234.	T	What is the most famous football game each year		
235.	Ss	The super ball		
236.	T	Very good. Number 2 what shape is the football		
237.	Ss	Oval		
238.	T	Correct. Number 3 why are there white rings on each end of the football		
239.	Ss	To help player to see the ball		
240.	T	Good, why do players need protective equipment during the game		
241.	Ss	To keep the body safe		
242.	T	Correct. Who play American football		
243.	Ss	All of these		
244.	T	Good. What do officials do during the game of football		
245.	Ss	Make sure the rules are followed		
246.	T	Ok. Which of the following is not true		
247.	Ss	The white lines are to keep players safe		
248.	T	Good. The word grip means to		
249.	Ss	Hold tightly		
250.	T	Task to finish the class you are gonna do it at home. Y lo anexan al protafolio asi como tambien la task. Van a look for in the internet about the history of soccer and with the information you are going to organize a timeline in a sheet of paper for next class. Good bye	Post reading	The teacher assigns the post reading task and explains it. It is based on and connected to the activities done in class
251.	Ss	Good bye teacher		

Appendix 5: Audio Recording Transcript – Class N° 2**Lesson 2****Date:** May the 16th / 2016**Time:** 60 Minutes**Grade:** Eleventh

Purpose: to analyze students' interactions during the English class to observe how they react to reading activities, how they perform them and how do they deal with them when their learning styles are matched.

GRADE: 11TH			Class 1 after matching students' learning styles to reading activities	
			Class stage	Comments
1.	T	Good afternoon	Introduction Pre-reading	In this part instructions were given in english but the teacher used papers and body language to make students to convey the message and it worked. Students walked around and start looking at their partners works
2.	Ss	Good afternoon teacher		
3.	T	How are you today		
4.	Ss	Fine teacher (.) good teacher		
5.	T	Ok (.) I am giving back to you the timelines you did in the previous class (4) I want you to stand up and look around the class and look for one that has one sport you like (2) and have a general look (3) the way it is organized (.) pictures (.) titles and then chose one event and read it and try to keep the info so you can report it (2)Is it CLEAR		
6.	Ss	Vas a caminar por el salón y vas a buscar un trabajo de un compañero de un sport que te like ya. Y lo vas a leer para que digas algo de eso		
7.	Sx	Ammm ok ok		
8.	Ss	Ey tu que tines?		
9.	Sx	Basketball		
10.	Sx	Yo veo		
11.	Sx	Hey marica que dibujo de bacano (.) como se llama este estadio		All the students actively are stood up around the class checking their partners' works and sharing information.
12.	Sx	Mira ahí está el nombre		
13.	Ss	Teacher (5) Teacher Please		
14.	T	Yes?		
15.	S2	Ya termine		
16.	T	Ok (2) let's wait for your partners (.) something difficult?		
17.	S2	No teacher (.) I participate		
18.	T	Ok (5) guys 2 minutes and we share		
19.	Ss	Ok teacher		
20.	Sx	Teacher que significant esto?		
21.	T	Century? (3) one hundred years		
22.	Sx	100 años?		
23.	T	Yes		
24.	Sx	Osea un siglo		

25.	S1	Teacher como se lee este año?		
26.	T	Eighteen ninety one		
27.	S1	Repeat please		
28.	T	EIGHTEEN NINETY ONE		
29.	S2	Teacher a question (2) esta es la de Camila (2) el 1863 se repite dos veces (.) entonces hay que colocarlo dos veces		
30.	T	Yes it could be		
31.	Sx	Juegos olímpicos		
32.	Sx	Ese deporte se da en los juegos olímpicos en esa fecha por primera vez (2) mira esos son los anillos de los juegos olímpicos ósea que ahí dice eso (.) mira first es uno		
33.	Sx	Bueno yo digo eso		
34.	Sx	Profe (2) cuando es por ejemplo de 1800 1900 (.) como se lee eso?		The Teacher start distributing some pieces of paper to students
35.	T	Devide the day in two (2) for example eighteen ninety 5 and so on		
36.	Sx	Osea dos y dos		
37.	T	Yes		
38.	Ss	Teacher que vamos a hacer co esto ?		
39.	T	Keep it and I wil tell you later		
40.	Ss	Ok teacher		
41.	Sx	Vamos a hacer un juego (.) si encuentro este me da otro		
42.	T	I don't have more (.) I gave them all to your partners		
43.	T	Guys are you done?		
44.	Ss	Yes teacher		
45.	T	Ok let's start (.) go back to your places		
46.	Sx	Teacher espere y tomo notas		During this sharing all students were paying attention and actively participated. So far the uses of dictionary or questions to the teacher for translations or meanings have been very few. The whole class continue participating and sharing the information.
47.	T	Ok hurry up		
48.	T	So let's start reporting (.)who wants to start? Tell me the sport, the year and the event for example basketball (.) in 1993 Michael Jordan retired		
49.	Sx	Teacher I want to participate (2) soccer (2) nineteen four (.) the event is (.) creation of the FIFA		
50.	T	CREATION OF THE FIFA (3) another one		
51.	S1	Year eighteen eighty one (2) first female world championship		
52.	T	What sport?		
53.	S1	Soccer		
54.	T	Interesting (2) so THAT WAS THE FIRST TIME THERE WAS A FEMALE WORLD CUP		
55.	S1	Yes teacher		
56.	S3	This is of Andrea (3) in eighteen eighty eight (4) was the first competition of the leagues		
57.	T	Mishelle (.) you said you want to participate right?		
58.	Sx	Si pero espere que le estoy preguntando		
59.	T	Ok another volunteer		

60.	Sx	Eh (2) Maria Isabel (4) in nineteen eighty one (4) penalty was introduced		
61.	T	Ok (.) interesting (4) another event		
62.	Sx	From Milena in nineteen ninety four Copa America happened to be the best		
63.	T	Thank you		
64.	S2	In nineteen fifteen creation of the UEFA		
65.	T	Very good		
66.	T	Ok guys now (.) pay attention to the instructions for the next activity (.) in Spanish (.) a algunos compañeros les di algo sobre la historia de algunos deportes en un pedazo de papel que pueden tener la letra a b c or d y a otros les di algunos names de algunos sports (.) can you mention the sports		Here the teacher emphasizes a lot on repeating louder what students say to help them understand and pay attention. He uses the body language a lot
67.	Ss	Basketball hockey volleyball and tennis		
68.	T	Very good (2) so we have four sports (.) I will mention them again BASKETBALL HOCKEY VOLLEYBALL AND TENNIS		
69.	Ss	Teacher falta uno (2) skateboarding		
70.	T	Oh yes and SKATEBOARDING		
71.	T	Que vamos a hacer (.) nos vamos a para de las chairs y vamos a encontrar cual es la pareja para descripción (.) usen keywords en las descripciones y las imágenes en los nombres de los deportes para hallar las parejas		
72.	Ss	Ok Teacher		
73.	Ss	Teacher ya		
74.	T	Wait for you partners		
75.	Sx	Teacher como lo encuentro		
76.	T	Lee mira tú descripción y busca el deporte que corresponde		
77.	Sx	Ah (.) pero no tengo que traducir		
78.	T	No necesitas traducir, usa palabras claves de la descripción y las imágenes y verás que es fácil		
79.	Ss	Quien tiene tenis		
80.	Sx	Y tu como sabes que esa es tennis		
81.	Sx	Porque aquí dice racket y la racket es del tennis		
82.	Sx	Cierto (.) joda tu si sabes		
83.	S3	Teacher una pregunta (.) Teacher (.) Teacher (.)		
84.	T	Yes (.) tell me		
85.	S3	El freestyle cuenta como deporte		
86.	T	Mmm i really don't know if it is an official sport but many people practice it as a sport		
87.	S3	Amm pero yo creo que si teacher		
88.	T	Maybe		
89.	Sx	Teacher (.) oldest que significa		
90.	T	Superlative (.)el mas Viejo o Antiguo		
91.	Sx	Ey quien tiene tenis		
92.	Ss	Aca		

93.	Sx	Mira lo jugaban en Egipto		
94.	T	Did you finish		
95.	Ss	Yes		
96.	T	Ok come back to your place and stay with your partner (.) the one you have the matching with		
97.	Ss	Ey come back (.) no ves que el teacher esta diciendo		
98.	T	Ok pay attention (.) silence (5) stay next to your couple (8) ok hands up if you have the history about the sport A		
99.	Ss	Nosotros professor ((hands are up))		
100.	T	Ok I am going to read aloud the description and you will follow my reading on your papers (.) ((teacher reading the description of basketball)) (.) what is the name of the sport?		
101.	Ss	Basketball		
102.	T	B (.) who has B?		
103.	Ss	La b la b ((hands up))		
104.	T	Ok good (.) ((teacher reading the description of tennis)) (.) What is the name of the sport?		
105.	Ss	Tennis		
106.	T	Are you sure?		
107.	Ss	Yes		
108.	T	C		
109.	Ss	((hands up))		
110.	T	(.) ((teacher reading the description of hockey)) (.) What is the name of the sport		
111.	Ss	Ice Hokey		
112.	T	Very good (.) and finally D ((teacher reading the description of skateboarding))		
113.	Ss	Skateboarding		
114.	T	Yes very good (.) now look at the board and do the matching based on the information we just read	Post reading task	All students got the answers very easily and participated
115.	Ss	Ok teacher		
116.	Ss	La 4 es la A		
117.	Sx	El basketball no porque es muy reciente		
118.	Sx	They were playing in acietn egypt		
119.	Sx	La f (.) la f		
120.	Sx	La 4 con la c		
121.	Ss	Teacher ya		
122.	T	A ver esta (.) it is the newest sport		
123.	Ss	Yo yo (.) skateboarding (.) yo sé que tiene que ver con ???		
124.	Sx	Con lo de los años porwue de todos es el mas reciente		
125.	T	Yes very good (5) me van a decir a que correspondent cada uno		
126.	Ss	Tennis es la que sigue		
127.	T	La d		
128.	Ss	Que significa indoor		
129.	Sx	Que está dentro		
				In the last part of the class students keep participating very well. There were very few instances when they used the dictionary of translator. Almost all of them knew the answers.

130.	Sx	Entonces es basketball		
131.	T	Very good (.) the next one		
132.	Ss	Ice hockey		
133.	T	Good (.) the last one		
134.	Ss	Hockey		
135.	Sx	No esa no es		
136.	S3	Ice hockey porque dice the modern version		
137.	T	Yes that correct (2) finally I am going to read something and your gonna say if is true or false		
138.	Ss	Ok		
139.	T	The fist basketball were orange		
140.	Ss	True yes		
141.	Sx	The characteristic orange ball has been part of the game since the beginning asi que es true		
142.	T	Very good. The rules of basketball are similar to when it statarted		
143.	S1	Yes (.) no han cambiado mucho ahi dice en el texto the rules havent changed too much		
144.	T	Correct (.) tennis is French in origin		
145.	Sx	True because ahi dice		
146.	T	Que dice		
147.	Sx	Was developed in france		
148.	T	Very good (.) people played ancient hockey in ancient Greece		
149.	Ss	False		
150.	T	Why?		
151.	S1	Porque era en ancient Egypt no Greece		
152.	T	Very good (.) and finally the last one (.) skateboarding has not always been a popular sport		
153.	Ss	Yes		
154.	Sx	Nunca ha sido		
155.	Sx	Es verdadero porque no siempre ha sido popular (.) ahí dice		
156.	T	Good (.) that's it or today (.) thank you very much		

Appendix 6: Teacher's reflective log – lesson 1 before matching students learning styles

This was an English class with students from 11th grade. The class is a mixed group with about 40 pupils. The lesson was mainly focused on the reading skill as part of the curricula and with the purpose of training students to take the saber 11 exam by the end of the year.

The lesson was organized in three stages; the pre, while and post reading tasks. It started with a vocabulary activity about the reading so students could activate their prior knowledge and be prepared with input for the reading task; after that they answered some comprehension questions based on a text they read and finally based on the topic they read they had to create a timeline with information they looked for. I consider that the way the class is planned is appropriate and it is thought to make sure students have enough support to perform well.

During the initial part when I announced that we were working on a reading task, some students made some rejecting gestures; in general they don't like reading not even in their first language so they consider reading in a foreign language as something difficult. When they received the material there were some comments about the length which they considered it was too much (only short three paragraphs), however the whole class was in the mood of working. For the first activity which was matching a list of words with their definition they immediately started struggling with the vocabulary; the first thing they did was start asking for translations. Almost all of them took out the dictionary or their mobiles in order to look for a word. They didn't even check or try to match using keywords. Very few of them did this. In fact it took so long for them to complete this task. During the lesson they kept asking me about definitions and for help and in short conversations with them they said that the first thing they do when they are going to read is to translate to their first language. I think this is a rooted practice they have from previous years or maybe they don't know other ways to approach texts in a foreign language. The main strategy they use is translation whenever they read. At the end they worked together and with my help they completed the task.

During the second phase of the lesson – answering reading comprehension questions based on the text – students did better, the previous activity helped them to have a background about what they were reading so it was easier and the previous activity was something very effective. However they still were too dependent on their dictionaries or on the teacher to

translate words or phrases from the text. At the end of the activity when this was shared in the class, almost all students got right answers so this could be an indicator that they could finally comprehend what they were reading. In terms of time, the flow was better and it was a positive thing.

For the final stage of the lesson it was explained the instructions to complete the task. The intention of this one is they start learning to select and how to organize important information from a text. They will do this by creating a timeline –text graphic organizer- from a text.

Some important aspects to remark about the lesson is that the teacher support was a key to help students perform well in the task. In the same way the all could successfully complete the activities which are a good indicator. On the other hand, it is important to think about ways to teach them how to deal with texts having more options that only translating for them to comprehend.

Appendix 7: Teacher's reflective log – lesson 2 after matching students learning styles

In this class session there were many positive elements from my perspective; first it was better planned than previous classes and so students had more support throughout the activities done. In the same way, the activities varied in styles and ways of presenting class materials so every student's needs were met and the class was very active. Another thing was that in terms of time management students did better.


This class was also planned taking into account most predominant students' learning styles that were identified in previous lessons using a questionnaire that is why the activities were always trying to match as much learning styles as possible. In the initial part of the class students work in groups and individually and moving around the class to look at some written material with a lot of visual aids like pictures. Although the activity consisted on reading information and pictures they did not show apathy towards it, in fact they were very curious because what they were reading and looking at was created by them so it was motivating for them. When sharing the information that they were working on, the teacher always making emphasis on what they said to reinforce. There was also some reading aloud to keep them focus and privilege auditory students.

Something important to remark was that during the whole session there was little use of the dictionary which means that the way the activities were presented gave the support and helped them to grasp and understand more information. This was also possible because this class was connected to the previous ones so they had prior knowledge. It was noticed that in this case that the additional support provides throughout the activities replace some actions they used to do when they were reading and used another strategies that let them perform better.

It is also important to say that they always participated eagerly and whenever they shared answers they did very well. Students also felt more confident and almost nobody perceived the activities as something difficult; in fact it seemed as they did not realize they were reading for checking comprehension.

There were some instances during the class that can be object of improvement; when working in groups there is little interaction in the target language. It is almost always the teacher the one who promotes the use of English. In general it could be said the purpose of the class was achieved and students performed well during the whole session.

Appendix 8: Class planning before matching students learning styles – lesson 1

	INSTITUCIÓN EDUCATIVA LA RIBERA	
	PLAN DE CLASES	
ÁREA: Ingles	ASIGNATURA: Ingles	
GRADO: 11	DOCENTE: Luis Martínez	
UNIDAD: Modulo 1 Teen culture Unit 1 “having fun – sports and hobbies ”		
EJE PROBLEMICO: ¿Qué actividades realizo en mi tiempo libre que contribuyan a mi buena salud física?		
TEMAS ESPECIFICOS: <ul style="list-style-type: none"> - Sports - Reading comprehension 		
FECHA: Mayo 2 de 2016	SESIONES PROBABLES: 1 de 55 minutos	
COMPETENCIA (S) Comprendo textos de diferentes tipos y fuentes sobre temas de interés general y académico.		
INDICADOR (ES) DE DESEMPEÑO: <ul style="list-style-type: none"> - Identifico palabras clave del texto que me ayudan a comprender su sentido general - Comprendo la información detallada de un texto y respondo a preguntas sobre ello 		
RECURSOS: <ul style="list-style-type: none"> - Human - School items - Photocopies 		
ACTIVIDADES Y ESTRATEGIAS METODOLOGÍCAS <ul style="list-style-type: none"> - Pre-reading task: 15 minutes • Teacher comments about football: ask students questions about this sport. Do you know it? Do you like it? Do you watch it? Do you know the rules? What do you know about it? • Vocabulary matching about the main topic. Introduce students to the topic and give them input to support understanding when reading 		

AMERICAN FOOTBALL

Match the word with the definitions. Draw a line		
Beginning		either of two periods of time into which a game is divided
Ancient		a piece of soft thick cloth or rubber which is used to protect a part of the body, give shape to something or clean something
Half		a piece of thread sewn in cloth, or the single movement of a needle and thread into and out of the cloth which produces this
Helmet		the first part of something or the start of something
Pad		a strong hard hat that covers and protects the head
Equipment		an object which you hold to your lips and blow through in order to make a loud, high sound
Whistle		of or from a long time ago, having lasted for a very long time
Leather		to hold very tightly
Stitches		animal skin treated in order to preserve it, and used to make shoes, bags, clothes, equipment, etc
Grip		the set of necessary tools, clothing, etc. for a particular purpose

- **Reading task:** 35 minutes

Silent reading; using previous vocabulary highlighted in bold in the text to help you understand and answer comprehension questions

AMERICAN FOOTBALL

American type of football was developed in the 19th century from soccer and rugby football. Played by professionals, amateurs, college, high schools, or young children, football in American is one of the most popular sports besides basketball and baseball. It attracts millions of fans each fall and people are very supportive of their favorite teams. The origin or **beginning** of football may have been a game played by the **ancient** Greeks called Harpaston. In this game, there was no limit to the number of players. The ball was kicked, thrown, or run by the players and the object was to move a ball across a goal by kicking.

The football playing field of today is rectangular in shape and measures 100 yards long and 53.5 yards wide. White lines are painted on the playing field to mark off the distances to the end zone. The game is divided into four quarters, each fifteen minutes long. The first two quarters are known as the first **half**. There is a rest period between two halves which usually last about fifteen minutes.

Each team has eleven players. Each team has offensive players (play when the team has possession of the ball) and defensive players (play when the other team has the possession of the ball). Because of the body contact players have during the game, **helmets** are worn to protect their head and face area, whereas **pads** are worn to protect the shoulders, arms, and legs. Protective **equipment** must be worn because of the body contact players have during the game.

Officials supervise the game and are considered to be very important to the game of football. They carry **whistles** and flags to make certain that the rules of the game are followed during the game.

The football is made of **leather** and is brown in color. It is **shaped** much like an oval and has white rings near each end of the football. These rings help the players see the ball when it is thrown or someone is running with it. The eight **stitches** on the top of the football help the players to **grip** the ball when throwing or passing.

The most famous game of the year is Super Bowl that is played in January or February. It is televised around the world and is watched by millions of people each year.

Answer each of the following questions based on the text.

- | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>1. What is the most famous football game each year?</p> <p>a. the Georgia-Florida game
b. the Super Bowl
c. the Alabama-Auburn game
d. the Army-Navy game</p> <p>2. What shape is the football?</p> <p>a. rectangular
b. circle
c. triangle
d. oval</p> <p>3. Why are there white rings on each end of the football?</p> <p>a. to help players see the ball
b. to make it look nice
c. to help players score
d. to help players run</p> <p>4. Why do players need protective equipment during the game?</p> <p>a. to make their uniforms fit
b. to keep the body safe
c. to see the ball
d. to make touchdowns</p> | <p>5. Who plays American football?</p> <p>a. professional players
b. college players
c. high school players
d. all of these</p> <p>6. What do officials do during the game of football?</p> <p>a. watch the game
b. take up tickets
c. make sure the rules are followed
d. kick the ball</p> <p>7. Which of the following is NOT true?</p> <p>a. The football field is rectangular in shape.
b. The field measures 100 yards long and 53.5 yards wide.
c. The white lines are used to keep players safe.
d. The rest period between at the half lasts about fifteen minutes.</p> <p>8. The word grip means to _____.</p> <p>a. hold tightly
b. score during the game
c. end zone
d. supervise the game</p> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

- **Post reading task:** 5 minutes (only explanation, this is a homework)
Choose one sport you like and look for its history. Then organize a timeline and bring it to next class.

EVALUACIÓN:


- Class participation
- Written work
- Teacher's Monitoring
- Self-assessment

OBSERVACIONES:

Firma docente del área:

V.B. Jefe de área

Appendix 9: Class planning after matching students learning styles – lesson 2

	INSTITUCIÓN EDUCATIVA LA RIBERA	
	PLAN DE CLASES	
ÁREA: Ingles	ASIGNATURA: Ingles	
GRADO: 11	DOCENTE: Luis Martínez	
UNIDAD: Modulo 1 Teen culture Unit 1 “having fun – sports and hobbies ”		
EJE PROBLEMICO: ¿Qué actividades realizo en mi tiempo libre que contribuyan a mi buena salud física?		
TEMAS ESPECIFICOS: <ul style="list-style-type: none"> - Sports - Reading comprehension (identify key words, anticipate content from general text patterns, grasp meaning of vocabulary in the context of the text) 		
FECHA: Mayo 16 de 2016	SESIONES PROBABLES: 1 de 55 minutos	
COMPETENCIA (S) Comprendo textos de diferentes tipos y fuentes sobre temas de interés general y académico.		
INDICADOR (ES) DE DESEMPEÑO: <ul style="list-style-type: none"> - Identifico palabras clave del texto que me ayudan a comprender su sentido general - Comprendo la información detallada de un texto y respondo a preguntas sobre ello 		
RECURSOS: <ul style="list-style-type: none"> - Human - School items - Photocopies - Video beam - Power point presentation 		
ACTIVIDADES Y ESTRATEGIAS METODOLOGÍCAS <ul style="list-style-type: none"> - Pre-reading task: 10 minutes • Students go around the class and start looking at their partners’ sports timelines which was homework assigned in the previous class. Students looked for information about the history of one sport and organized a graphic timeline with pictures with the most relevant information and events. During this class, they will report orally out loud one event. (kinesthetic, visual, group and auditory) - Reading task: 35 minutes • Text and title matching about the main topic. Some students will have pieces of paper about sports history and the others the name of the sports. (kinesthetic, group and visual) 		

2 Read about the history of some sports. Match A–D with a sport.*A – basketball*~~basketball~~ – tennis – skateboarding – ice hockey

<p>A</p> <p>It started in the USA in 1891 and was the idea of a Canadian teacher. He wanted to create a game that his students could play indoors during the winter. The basic rules haven't changed much since then. It's been an Olympic sport since 1936. The characteristic orange ball has been part of the game since the 1950s.</p>	<p>B</p> <p>People have played a form of this game for about five hundred years. The modern game developed on grass courts in England. However, it evolved from an indoor game from France. The name of the sport comes from the French word <i>tenez</i>, meaning 'take it'. Players said this when they served the ball.</p>
<p>C</p> <p>There are pictures in Ancient Egypt of people hitting an object with a curved stick. They show that a form of this sport has existed for thousands of years. In Europe, people have played a similar game on ice since the 16th century. The first modern game took place in Montreal, Canada, in 1875.</p>	<p>D</p> <p>This sport hasn't existed for very long. It started in the USA in the 1950s. Surfers there invented a way to surf on the pavement when they finished surfing on the sea. Its popularity has gone up and down since then. However, it's been back in fashion for the last few years. It's been present at The Extreme Games since they started in 1995.</p>

- Each pair will read out loud the name of the sports and the sports history to share information with the rest of the class. Then teacher will present in slides with texts and answers and read them for students. then they will work on a matching to check understanding (**auditory, visual and group**)
- Students will work on a matching to check understanding. They will match on the board over the projected slides. Then they will read out loud the full sentence matched (**visual, kinesthetic, auditory and individual**).

Match 1–6 with a–f and write them in your notebook.*1 – d These sports have the oldest origins. Tennis and ice hockey.*

- 1 These sports have the oldest origins.
- 2 It's the newest sport.
- 3 They were originally indoor games.
- 4 They started in the USA.
- 5 The modern version of the game comes from Canada.
- 6 It's been an Olympic sport for more than 70 years.

- a basketball and tennis
- b ice hockey
- c basketball
- d tennis and ice hockey
- e skateboarding
- f basketball and skateboarding

- Post reading task: 10 minutes

Some questions to check understanding (individual, visual and tactile)

True or false? Correct the false sentences.

1 The first basketballs were orange.

False – They became orange in the 1950s.

2 The rules of basketball are similar to when it started.

3 Tennis is French in origin.

4 The word 'tennis' comes from the English phrase 'take it'.

5 People played ice hockey in Ancient Greece.

6 Skateboarding hasn't always been a popular sport.

EVALUACIÓN:

- Class participation
- Written work
- Teacher's Monitoring
- Self-assessment

OBSERVACIONES:

Firma docente del área:

V.B. Jefe de área